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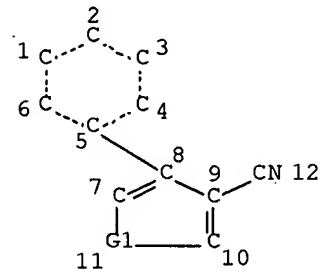


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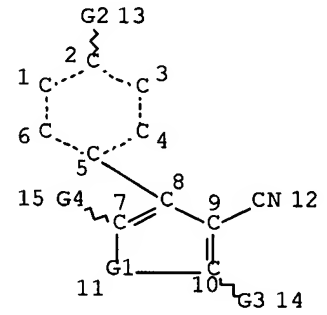


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STEREO ATTRIBUTES: NONE
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L13 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:523307 CAPLUS Full-text
DOCUMENT NUMBER: 141:243257
TITLE: Novel thiophenes and analogues with anthelmintic activity against Haemonchus contortus
AUTHOR(S): Gonzalez, Isabel C.; Davis, Leon N.; Smith, Charles K.
CORPORATE SOURCE: Elanco Animal Health Research and Development, A Division of Eli Lilly and Company, Greenfield, IN, 46140-0708, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(15), 4037-4043
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:243257
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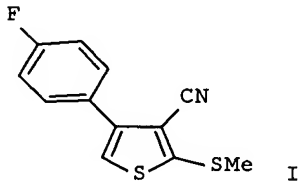
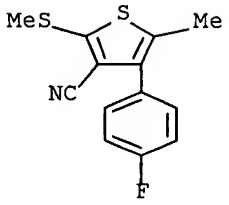


I

AB A new series of analogs of 4-(4-fluorophenyl)-2-methylthio-thiophene-3-carbonitrile (I) were synthesized and evaluated for their in vitro and in vivo anthelmintic activity against Haemonchus contortus.
IT 748818-00-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(novel thiophenes and analogs with anthelmintic activity against Haemonchus contortus)
RN 748818-00-0 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-fluorophenyl)-5-methyl-2-(methylthio)- (CA INDEX NAME)



L13 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:356224 CAPLUS Full-text
DOCUMENT NUMBER: 141:314252
TITLE: Similarity and dissimilarity between Wittig and Wittig-Horner synthon reactivity toward cyclic and acyclic cis-disulfides
AUTHOR(S): Abdou, Wafaa M.; Khidre, Maha D.; Kamel, Azza A.
CORPORATE SOURCE: Department of Pesticide Chemistry, National Research Centre, Cairo, Egypt
SOURCE: Heterocyclic Communications (2004), 10(2-3), 217-222
CODEN: HCOMEX; ISSN: 0793-0283
PUBLISHER: Freund Publishing House Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:314252
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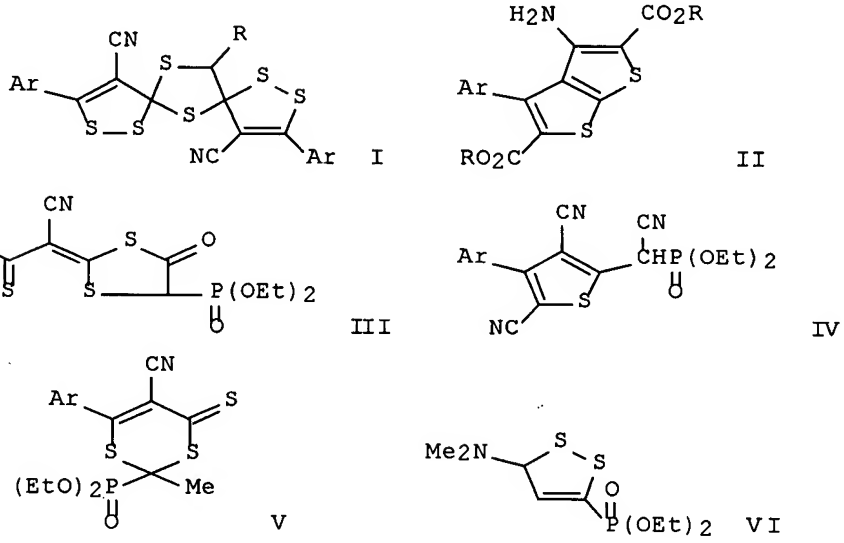


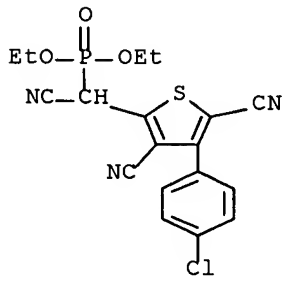
AB The behavior of different types of α-phosphoryl carbanions such as alkoxycarbonylmethylene, cyanomethylene and viny-phosphonate generated from (EtO)2P(O)R (R = CH2CO2Me, CH2CO2Et, CH2CN, CH:CH2) toward 5-(4-chlorophenyl)-4-cyano-1,2-dithiol-3-thione and tetramethylthiuram disulfide, i.e. Me2NC(:S)S-S-C(:S)NMe2 has been investigated. The reactions proceeded in the presence of a base whereby several substituted thiols, dithiols and different types of dimeric products as well as many phosphono substituted S-

heterocycles, i.e. (I, II; R1 = Me, Et; Ar = 4-chlorophenyl), (III), (IV), (V), and (VI), were obtained.

IT 768399-08-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(similarity and dissimilarity between Wittig and Wittig-Horner synthon reactivity toward cyclic and acyclic cis-disulfides)

RN 768399-08-2 CAPLUS

CN Phosphonic acid, [[4-(4-chlorophenyl)-3,5-dicyano-2-thienyl]cyanomethyl]-, diethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:60143 CAPLUS Full-text

DOCUMENT NUMBER: 140:111425

TITLE: Preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors

INVENTOR(S): Michaelides, Michael R.; Curtin, Michael L.; Dai, Yujia; Davidsen, Steven K.; Frey, Robin R.; Guo, Yan; Ji, Zhiqin

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 62 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004014756	A1	20040122	US 2003-392951		20030320 <--
US 2006276490	A1	20061207	US 2006-464961		20060816
PRIORITY APPLN. INFO.:			US 2002-366708P	P	20020321
			US 2003-392951	B3	20030320

OTHER SOURCE(S): MARPAT 140:111425

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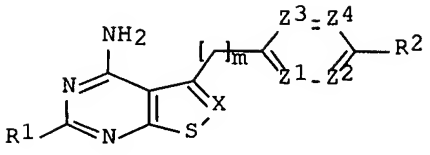

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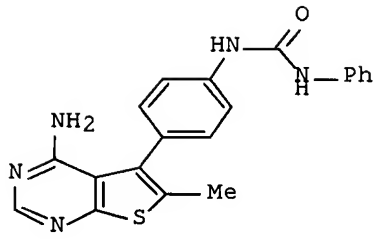


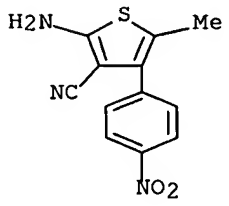
II

AB The title compds. [I; X = N, CR3; Z1 = N, CR4; Z2 = N, CR5; Z3 = N, CR6; Z4 = N, CR7; R1 = H, NH2; R2 = alkoxy, CN, OH, NO2, etc.; R3 = H, alkenyl, alkoxyalkyl, alkyl, etc.; R4-R7 = H, alkoxy, alkyl, halo, etc.; m = 0-2; provided that at least one of Z1-Z4 is other than N], useful for inhibiting protein tyrosine kinases, were prepared Thus, treating 5-(4-aminophenyl)-6-methylthieno[2,3-d]pyrimidin-4-amine (preparation given) with Ph isocyanate in CH2Cl2 afforded 87% II. The compds. I inhibited KDR at IC50's between about 0.003 μM and >50 μM, and Tie-2 at IC50's between about 0.01 μM and >50 μM. Pharmaceutical composition comprising the compound I was claimed.

IT 605661-11-8P, 2-Amino-5-methyl-4-(4-nitrophenyl)thiophene-3-carbonitrile 607713-63-3P, 2-Amino-5-[2-(dimethylamino)ethyl]-4-(4-nitrophenyl)-3-thiophenecarbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors)

RN 605661-11-8 CAPLUS

CN 3-Thiophenecarbonitrile, 2-amino-5-methyl-4-(4-nitrophenyl)- (CA INDEX NAME)



RN 607713-63-3 CAPLUS

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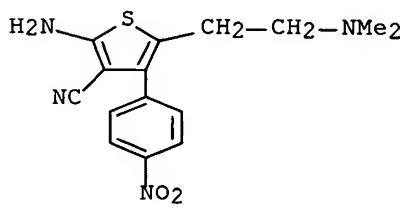

L13 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:950111 CAPLUS Full-text
DOCUMENT NUMBER: 140:5066
TITLE: Preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors
INVENTOR(S): Michaelides, Michael R.; Curtin, Michael L.; Dai, Yujia; Davidsen, Steven K.; Frey, Robin R.; Guo, Yan; Ji, Zhiqin
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S. Ser. No. 103,621.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003225273	A1	20031204	US 2003-378481	20030303 <--
US 2003181468	A1	20030925	US 2002-103621	20020321 <--
CA 2479363	A1	20031002	CA 2003-2479363	20030320 <--
WO 2003080625	A1	20031002	WO 2003-US8647	20030320 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
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AU 2003220437	A1	20031008	AU 2003-220437	20030320 <--
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JP 2005526804	T	20050908	JP 2003-578379	20030320
MX 2004PA09142	A	20041126	MX 2004-PA9142	20040921

PRIORITY APPLN. INFO.:			
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	US 2003-378481	A	20030303
	WO 2003-US8647	W	20030320

OTHER SOURCE(S): MARPAT 140:5066
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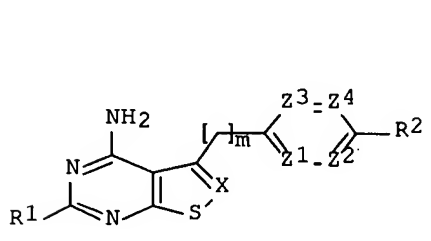

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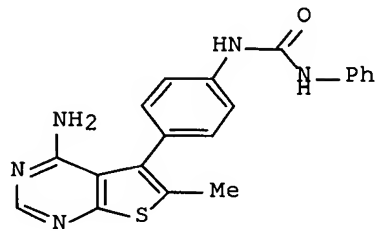


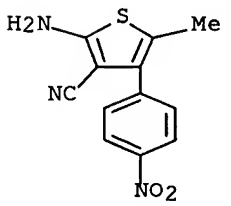
II

AB The title compds. [I; X = N, CR3; Z1 = N, CR4; Z2 = N, CR5; Z3 = N, CR6; Z4 = N, CR7; R1 = H, NH2; R2 = alkoxy, CN, OH, NO2, etc.; R3 = H, alkenyl, alkoxyalkyl, alkyl, etc.; R4-R7 = H, alkoxy, alkyl, halo, etc.; m = 0-2; provided that at least one of Z1-Z4 is other than N], useful for inhibiting protein tyrosine kinases, were prepared Thus, treating 5-(4-aminophenyl)-6-methylthieno[2,3-d]pyrimidin-4-amine (preparation given) with Ph isocyanate in CH2Cl2 afforded 87% II. The compds. I inhibited KDR at IC50's between about 0.003 μM and >50 μM, and Tie-2 at IC50's between about 0.01 μM and >50 μM. Pharmaceutical composition comprising the compound I was claimed.

IT 605661-11-8P, 2-Amino-5-methyl-4-(4-nitrophenyl)thiophene-3-carbonitrile 607713-63-3P, 2-Amino-5-[2-(dimethylamino)ethyl]-4-(4-nitrophenyl)-3-thiophenecarbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors)

RN 605661-11-8 CAPLUS

CN 3-Thiophenecarbonitrile, 2-amino-5-methyl-4-(4-nitrophenyl)- (CA INDEX NAME)



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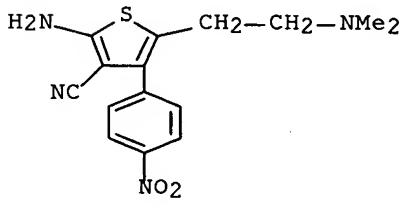

L13 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:777807 CAPLUS Full-text

DOCUMENT NUMBER: 139:292267

TITLE: Preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors

INVENTOR(S): Michaelides, Michael R.; Dai, Yujia; Davidsen, Steven K.; Frey, Robin R.; Guo, Yan; Ji, Zhiqin; Curtin, Michael

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 142 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080625	A1	20031002	WO 2003-US8647	20030320 <--
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US 2003181468	A1	20030925	US 2002-103621	20020321 <--
US 2003225273	A1	20031204	US 2003-378481	20030303 <--
CA 2479363	A1	20031002	CA 2003-2479363	20030320 <--
AU 2003220437	A1	20031008	AU 2003-220437	20030320 <--
EP 1487841	A1	20041222	EP 2003-716742	20030320
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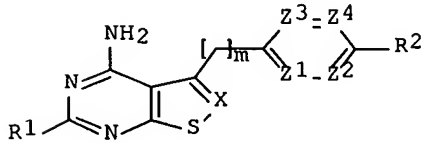
JP 2005526804	T	20050908	JP 2003-578379	20030320
MX 2004PA09142	A	20041126	MX 2004-PA9142	20040921

PRIORITY APPLN. INFO.:
US 2002-103621 A 20020321
US 2003-378481 A 20030303
WO 2003-US8647 W 20030320

OTHER SOURCE(S): MARPAT 139:292267
GI



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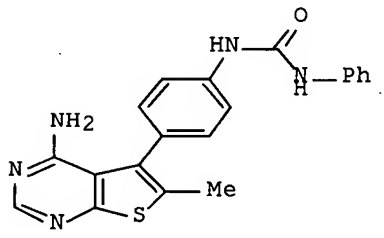


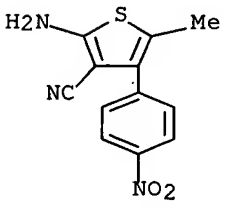
II

AB The title compds. [I; X = N, CR3; Z1 = N, CR4; Z2 = N, CR5; Z3 = N, CR6; Z4 = N, CR7; R1 = H, NH2; R2 = alkoxy, CN, OH, NO2, etc.; R3 =H, alkenyl, alkoxyalkyl, alkyl, etc.; R4-R7 = H, alkoxy, alkyl, halo, etc.; m = 0-2; provided that at least one of Z1-Z4 is other than N], useful for inhibiting protein tyrosine kinases, were prepared Thus, treating 5-(4-aminophenyl)-6-methylthieno[2,3-d]pyrimidin-4-amine (preparation given) with Ph isocyanate in CH2Cl2 afforded 87% II. The compds. I inhibited KDR at IC50's between about 0.003 μM and >50 μM, and Tie-2 at IC50's between about 0.01 μM and >50 μM. Pharmaceutical composition comprising the compound I was claimed.

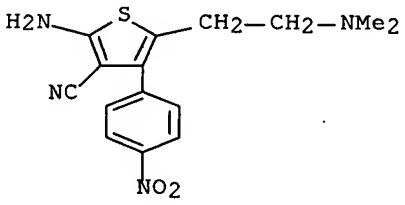
IT 605661-11-8P, 2-Amino-5-methyl-4-(4-nitrophenyl)thiophene-3-

carbonitrile 607713-63-3P, 2-Amino-5-[2-(dimethylamino)ethyl]-4-(4-nitrophenyl)-3-thiophenecarbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors)

RN 605661-11-8 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-methyl-4-(4-nitrophenyl)- (CA INDEX NAME)



RN 607713-63-3 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-[2-(dimethylamino)ethyl]-4-(4-nitrophenyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:757330 CAPLUS Full-text
DOCUMENT NUMBER: 139:276912
TITLE: Preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors
INVENTOR(S): Michaelides, Michael R.; Dai, Yujia; Davidsen, Steven K.; Frey, Robin R.; Guo, Yan; Ji, Zhiqin; Arnold, Lee D.; Wishart, Neil
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003181468	A1	20030925	US 2002-103621	20020321 <--
US 2003225273	A1	20031204	US 2003-378481	20030303 <--

CA 2479363	A1	20031002	CA 2003-2479363	20030320 <--
WO 2003080625	A1	20031002	WO 2003-US8647	20030320 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
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AU 2003220437	A1	20031008	AU 2003-220437	20030320 <--
EP 1487841	A1	20041222	EP 2003-716742	20030320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005526804	T	20050908	JP 2003-578379	20030320
MX 2004PA09142	A	20041126	MX 2004-PA9142	20040921
PRIORITY APPLN. INFO.:			US 2002-103621	A2 20020321
			US 2003-378481	A 20030303
			WO 2003-US8647	W 20030320

OTHER SOURCE(S): MARPAT 139:276912

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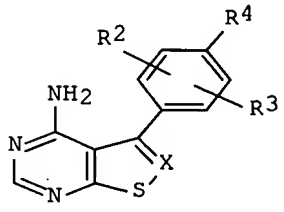

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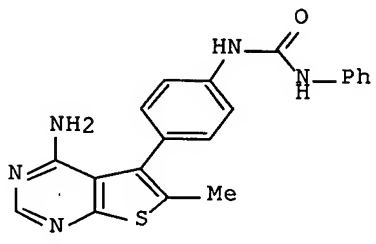


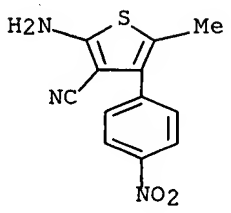
II

AB The title compds. [I; X = N, CR1; R1 = H, alkoxyalkyl, alkyl, etc.; R2, R3 = H, alkoxy, alkyl, NH2, halo; R4 = alkoxy, NH2, CN, OH, NO2, LR5; R5 = aryl, arylalkyl, heteroaryl, etc.; L = O, CO, CONR6, NR6CO, etc.; R6 = H, alkyl, aryl], useful for inhibiting protein tyrosine kinases, were prepared Thus, treating 5-(4-aminophenyl)-6-methylthieno[2,3-d]pyrimidin-4-amine (preparation given) with Ph isocyanate in CH2Cl2 afforded 87% II. The compds. I inhibited KDR at IC50's between about 0.005 μM and >50 μM, and Tie-2 at IC50's between about 0.02 μM and >50 μM. Pharmaceutical composition comprising the compound I was claimed.

IT 605661-11-8P, 2-Amino-5-methyl-4-(4-nitrophenyl)thiophene-3-carbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienopyrimidine and isothiazolopyrimidine kinase inhibitors)

RN 605661-11-8 CAPLUS

CN 3-Thiophenecarbonitrile, 2-amino-5-methyl-4-(4-nitrophenyl)- (CA INDEX NAME)



L13 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:570977 CAPLUS Full-text
DOCUMENT NUMBER: 139:117343
TITLE: Preparation of 4-aminopyridines for use in pest control
INVENTOR(S): Maurer, Fritz; Erdelen, Christoph; Kuck, Karl-Heinz; Mauler-Machnik, Astrid; Wachendorff-Neumann, Ulrike; Turberg, Andreas
PATENT ASSIGNEE(S): Bayer CropScience AG, Germany
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059903	A2	20030724	WO 2003-EP51	20030107 <--
WO 2003059903	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10201764	A1	20030731	DE 2002-10201764	20020118 <--
AU 2003235696	A1	20030730	AU 2003-235696	20030107 <--

PRIORITY APPLN. INFO.: DE 2002-10201764 A 20020118
WO 2003-EP51 W 20030107

OTHER SOURCE(S): MARPAT 139:117343
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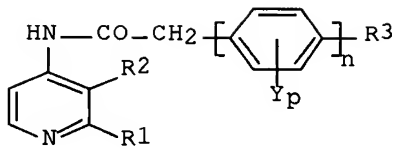

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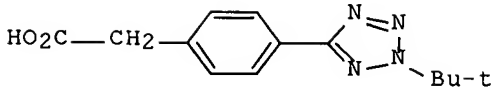

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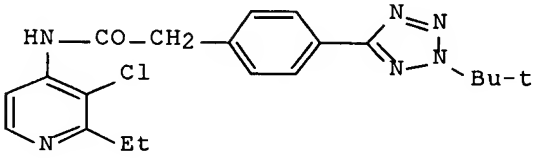


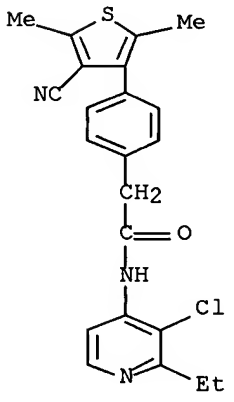
III

AB Title compds. I [R1 = alkyl; R2 = halo; R3 = heterocycle; n = 1, 2; Y = halo, alkyl, haloalkyl; p = 0-2] were prepared For example, coupling of carboxylic acid II, e.g., prepared from 4-cyanophenylacetic acid in 2-steps, and 2-ethyl-3-chloro-4-aminopyridine afforded aminopyridine III in 18% yield. In aphis gossypii pesticidal studies with gossypium hirsutum, aminopyridine III, at 500 ppm, exhibited 100% aphid mortality after 6-days. Compds. I are claimed useful for the control of microorganisms.

IT 565233-57-0P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of 4-aminopyridines for use in pest control)

RN 565233-57-0 CAPLUS

CN Benzeneacetamide, N-(3-chloro-2-ethyl-4-pyridinyl)-4-(4-cyano-2,5-dimethyl-3-thienyl)- (CA INDEX NAME)



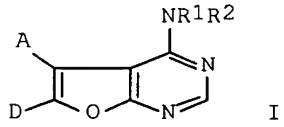
L13 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:170350 CAPLUS Full-text
DOCUMENT NUMBER: 138:221596
TITLE: Preparation of 4-aminofuro[2,3-d]pyrimidines as adenosine kinase inhibitors
INVENTOR(S): Bischoff, Erwin; Hauswald, Markus; Nell, Peter; Roehrig, Susanne; Schlemmer, Karl-Heinz; Steinhagen,

Henning; Stoltefuss, Juergen; Weigand, Stefan
PATENT ASSIGNEE(S): Bayer AG, Germany
SOURCE: Ger. Offen., 80 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10141212	A1	20030306	DE 2001-10141212	20010822 <--
WO 2003018589	A1	20030306	WO 2002-EP8906	20020809 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002333371	A1	20030310	AU 2002-333371	20020809 <--
EP 1425283	A1	20040609	EP 2002-796211	20020809
EP 1425283	B1	20050316		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005501122	T	20050113	JP 2003-523249	20020809
AT 291024	T	20050415	AT 2002-796211	20020809
ES 2239732	T3	20051001	ES 2002-2796211	20020809
US 2004259888	A1	20041223	US 2004-487373	20040719

PRIORITY APPLN. INFO.: DE 2001-10141212 A 20010822
WO 2002-EP8906 W 20020809

OTHER SOURCE(S): MARPAT 138:221596
GI

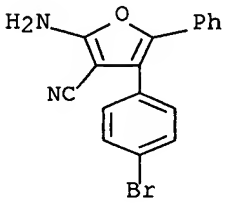


I

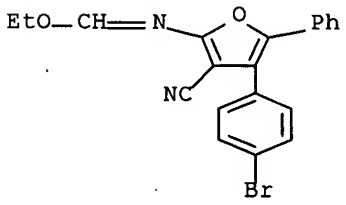
AB Title compds. [I; A = (substituted) Ph, 5-6 membered heteroaryl, etc.; D = -G-E-R3, etc.; G = (substituted) phenylene, 5-6 membered heteroaryl; E = bond, CO, SO2, NR4CO, NR4SO2; R4 = H, alkyl; R3 = halo, CF3, OH, alkoxy, OCF3, NO2, etc.; R1 = H, (substituted) cycloalkyl, alkyl; R2 = (substituted) alkyl, aryl, heteroaryl, heterocyclyl, cycloalkyl, etc.; NR1R2 = (substituted) 4-11 membered mono-, bi-, or spirocyclic heterocyclyl], were prepared Thus, 4-chloro-6-(3,5-dimethoxyphenyl)-5- phenylfuro[2,3-d]pyrimidine (preparation given) in EtOH was stirred with cycloheptylamine for 2 h at 40° followed by stirring with 1 N NaOH for 4 h at 90° and stirring over night to give 77% N-cycloheptyl-6-(3,5-dimethoxyphenyl)-5-phenylfuro[2,3-d]pyrimidine-4- amine. Several I inhibited adenosine kinase with IC50 = 10-100 nM in vitro.

IT 14774-61-9P 500712-34-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminofuropyrimidines as adenosine kinase inhibitors)
RN 14774-61-9 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-bromophenyl)-5-phenyl- (9CI) (CA INDEX NAME)



RN 500712-34-5 CAPLUS
CN Methanimidic acid, N-[4-(4-bromophenyl)-3-cyano-5-phenyl-2-furanyl]-, ethyl ester (CA INDEX NAME)



L13 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:814126 CAPLUS Full-text
DOCUMENT NUMBER: 137:325327
TITLE: Preparation of thienyl-substituted pyrimidinyl, pyridinyl and triazinyl amines as inhibitors of c-Jun N-terminal kinases (JNK) and other protein kinases
INVENTOR(S): Cao, Jingrong; Green, Jeremy; Moon, Young-Choon; Wang, Jian; Ledeboer, Mark; Harrington, Edmund; Gao, Huai
PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

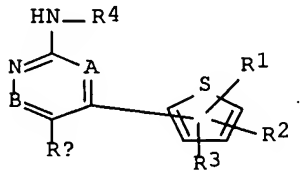
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083667	A2	20021024	WO 2002-US11570	20020410 <--
WO 2002083667	A3	20030103		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,

	CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2443487		A1	20021024	CA 2002-2443487	20020410 <--
AU 2002338642		A1	20021028	AU 2002-338642	20020410 <--
US 2003096816		A1	20030522	US 2002-121035	20020410 <--
US 6642227		B2	20031104		
EP 1389206		A2	20040218	EP 2002-762067	20020410
EP 1389206		B1	20060913		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2004535381		T	20041125	JP 2002-581422	20020410
AT 339416		T	20061015	AT 2002-762067	20020410
ES 2271322		T3	20070416	ES 2002-2762067	20020410
TW 235752		B	20050711	TW 2002-91107461	20020412
US 2004023963		A1	20040205	US 2003-437666	20030514
US 7084159		B2	20060801		
MX 2003PA09378		A	20040129	MX 2003-PA9378	20031013 <--
PRIORITY APPLN. INFO.:				US 2001-283621P	P 20010413
				US 2001-292974P	P 20010523
				US 2001-329440P	P 20011015
				US 2002-121035	A3 20020410
				WO 2002-US11570	W 20020410

OTHER SOURCE(S): MARPAT 137:325327

GI



I

AB The present invention provides thienyl-substituted pyrimidinyl, pyridinyl and triazinyl amines (shown as I, e.g. 2-methylsulfanyl-5-(2-phenylaminopyrimidin-4-yl)-4-(4-chlorophenyl)thiophene-3-carbonitrile): or a pharmaceutically acceptable derivative thereof, wherein A, B, Ra, R1, R2, R3 and R4 are as described in the specification. These compds. are inhibitors of protein kinase, particularly inhibitors of JNK, a mammalian protein kinase involved in cell proliferation, cell death and response to extracellular stimuli; Lck and Src kinase. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods of using those compns. in the treatment and prevention of various disorders. Although the methods of preparation are not claimed, 42 example prepns. of intermediates and I are included. Results of JNK, Src and Lck inhibition are tabulated for many I.

IT 473530-67-5P, 2-(Methylsulfanyl)-5-(2-(phenylamino)pyrimidin-4-yl)-4-(4-chlorophenyl)thiophene-3-carbonitrile 473530-70-0P, 2-(Methylsulfanyl)-5-(2-(phenylamino)pyrimidin-4-yl)-4-p-tolylthiophene-3-carbonitrile 473531-03-2P, 2-(Methylthio)-5-(2-aminopyrimidin-4-yl)-4-(4-carboxyphenyl)thiophene-3-carbonitrile 473531-04-3P, 2-(Methylthio)-5-(2-aminopyrimidin-4-yl)-4-(4-chlorophenyl)thiophene-3-carbonitrile 473531-05-4P, 2-(Methylthio)-5-(2-aminopyrimidin-4-yl)-4-(4-(trifluoromethyl)phenyl)thiophene-3-carbonitrile 473531-06-5P, 2-(Methylthio)-5-(2-aminopyrimidin-4-yl)-4-(4-methylphenyl)thiophene-3-carbonitrile 473531-08-7P,

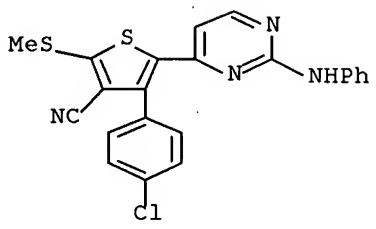
2-(Methylthio)-5-(2-aminopyrimidin-4-yl)-4-(4-methoxyphenyl)thiophene-3-carbonitrile 473531-09-8P 473531-11-2P 473531-12-3P, 2-(Methylthio)-5-(2-(phenylamino)pyrimidin-4-yl)-4-(4-(trifluoromethyl)phenyl)thiophene-3-carbonitrile 473532-07-9P , 2-(Methylthio)-4-(4-carboxyphenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-08-0P, 2-(Methylthio)-4-(4-chlorophenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-09-1P, 2-(Methylthio)-4-(4-(trifluoromethyl)phenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-10-4P, 2-(Methylthio)-4-(4-methylphenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-12-6P, 2-(Methylthio)-4-(4-methoxyphenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-13-7P, 2-(Benzylamino)-4-(4-(trifluoromethyl)phenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-15-9P, 2-(Benzylamino)-4-(4-methoxyphenyl)-5-(2-aminopyridin-4-yl)thiophene-3-carbonitrile 473532-16-0P, 2-(Methylthio)-4-(4-chlorophenyl)-5-(2-(phenylamino)pyridin-4-yl)thiophene-3-carbonitrile 473532-18-2P, 2-(Methylthio)-4-(4-(trifluoromethyl)phenyl)-5-(2-(phenylamino)pyridin-4-yl)thiophene-3-carbonitrile 473532-20-6P, 2-(Methylthio)-4-(4-methylphenyl)-5-(2-(phenylamino)pyridin-4-yl)thiophene-3-carbonitrile 473532-39-7P , 2-(Methylthio)-4-(4-carboxyphenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-40-0P, 2-(Methylthio)-4-(4-chlorophenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-41-1P, 2-(Methylthio)-4-(4-(trifluoromethyl)phenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-42-2P, 2-(Methylthio)-4-(4-methylphenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-44-4P, 2-(Methylthio)-4-(4-methoxyphenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-45-5P, 2-(Benzylamino)-4-(4-(trifluoromethyl)phenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-47-7P, 2-(Benzylamino)-4-(4-methoxyphenyl)-5-(3-amino-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-48-8P, 2-(Methylthio)-4-(4-chlorophenyl)-5-(3-(phenylamino)-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-50-2P, 2-(Methylthio)-4-(4-(trifluoromethyl)phenyl)-5-(3-(phenylamino)-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-52-4P, 2-(Methylthio)-4-(4-methylphenyl)-5-(3-(phenylamino)-1,2,4-triazin-5-yl)thiophene-3-carbonitrile 473532-82-0P, 2-(Methylthio)-4-(4-methylphenyl)-5-(2-((3-(benzyloxy)phenyl)amino)-5-methylpyrimidin-4-yl)thiophene-3-carbonitrile 473532-83-1P, 2-(Methylthio)-4-(4-methylphenyl)-5-(2-((3-hydroxyphenyl)amino)-5-methylpyrimidin-4-yl)thiophene-3-carbonitrile 473532-84-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

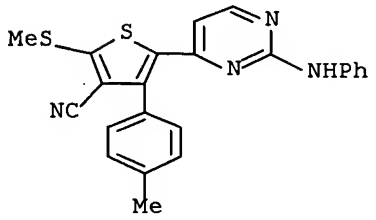
(drug candidate; preparation of thienyl-substituted pyrimidinyl, pyridinyl and triazinyl amines as inhibitors of JNK and other protein kinases)

RN 473530-67-5 CAPLUS

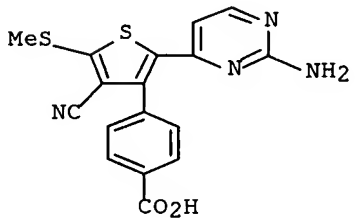
CN 3-Thiophenecarbonitrile, 4-(4-chlorophenyl)-2-(methylthio)-5-[2-(phenylamino)-4-pyrimidinyl]- (CA INDEX NAME)



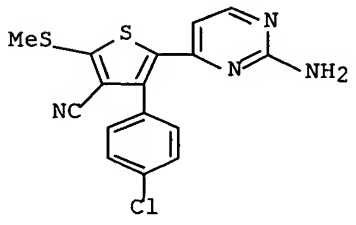
RN 473530-70-0 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-methylphenyl)-2-(methylthio)-5-[2-(phenylamino)-4-pyrimidinyl]- (CA INDEX NAME)



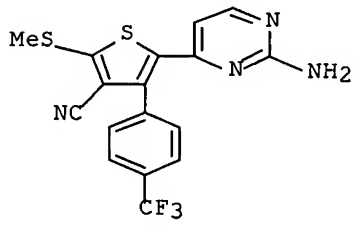
RN 473531-03-2 CAPLUS
CN Benzoic acid, 4-[2-(2-amino-4-pyrimidinyl)-4-cyano-5-(methylthio)-3-thienyl]- (CA INDEX NAME)



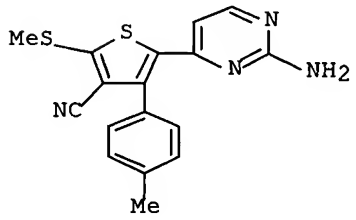
RN 473531-04-3 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-4-(4-chlorophenyl)-2-(methylthio)- (CA INDEX NAME)



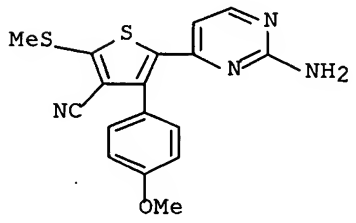
RN 473531-05-4 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-2-(methylthio)-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



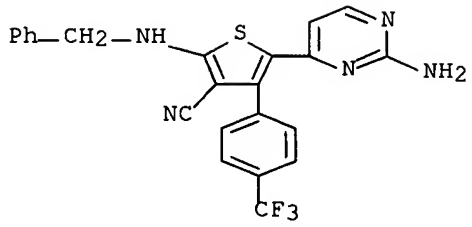
RN 473531-06-5 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-4-(4-methylphenyl)-2-(methylthio)- (CA INDEX NAME)



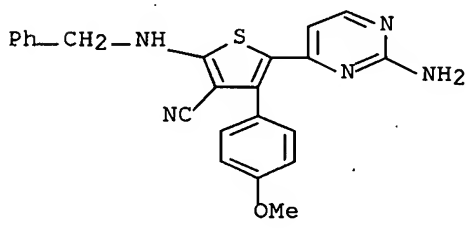
RN 473531-08-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-4-(4-methoxyphenyl)-2-(methylthio)- (CA INDEX NAME)



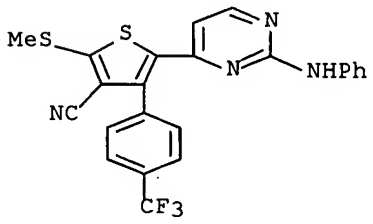
RN 473531-09-8 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-2-[(phenylmethyl)amino]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



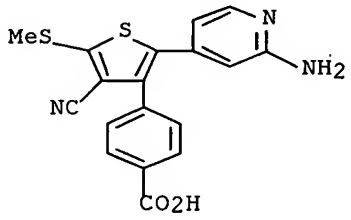
RN 473531-11-2 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyrimidinyl)-4-(4-methoxyphenyl)-2-[(phenylmethyl)amino]- (CA INDEX NAME)



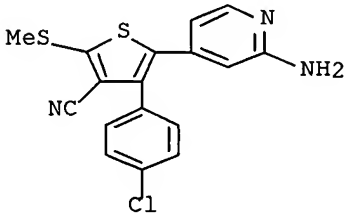
RN 473531-12-3 CAPLUS
CN 3-Thiophenecarbonitrile, 2-(methylthio)-5-[2-(phenylamino)-4-pyrimidinyl]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



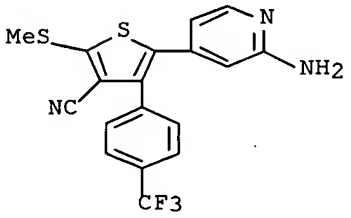
RN 473532-07-9 CAPLUS
CN Benzoic acid, 4-[2-(2-amino-4-pyridinyl)-4-cyano-5-(methylthio)-3-thienyl]- (CA INDEX NAME)



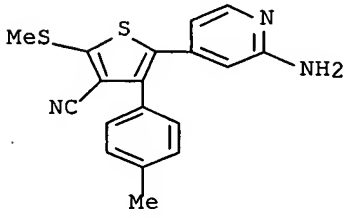
RN 473532-08-0 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-4-(4-chlorophenyl)-2-(methylthio)- (CA INDEX NAME)



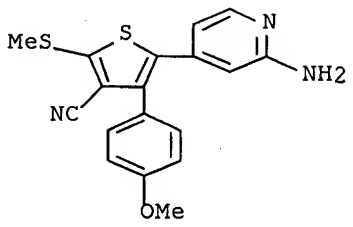
RN 473532-09-1 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-2-(methylthio)-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



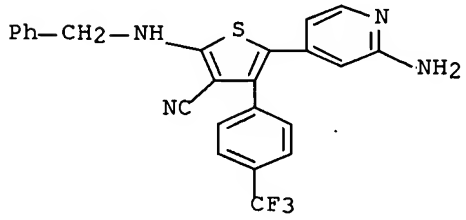
RN 473532-10-4 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-4-(4-methylphenyl)-2-(methylthio)- (CA INDEX NAME)



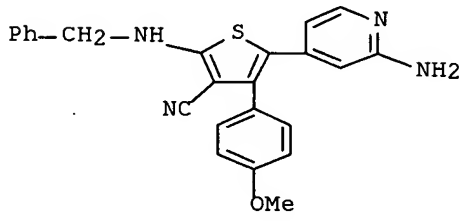
RN 473532-12-6 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-4-(4-methoxyphenyl)-2-(methylthio)- (CA INDEX NAME)



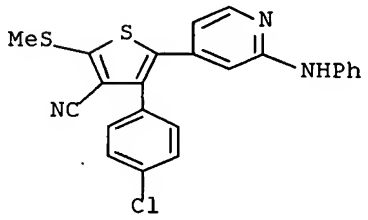
RN 473532-13-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-2-[(phenylmethyl)amino]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 473532-15-9 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(2-amino-4-pyridinyl)-4-(4-methoxyphenyl)-2-[(phenylmethyl)amino]- (CA INDEX NAME)

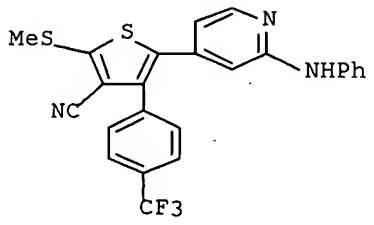


RN 473532-16-0 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-chlorophenyl)-2-(methylthio)-5-[2-(phenylamino)-4-pyridinyl]- (CA INDEX NAME)

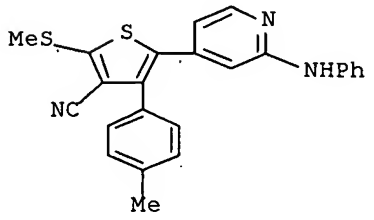


RN 473532-18-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-(methylthio)-5-[2-(phenylamino)-4-pyridinyl]-4-

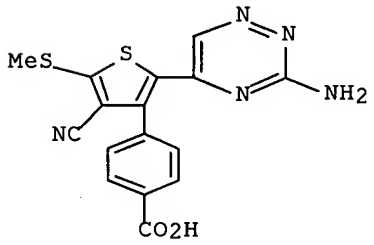
[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



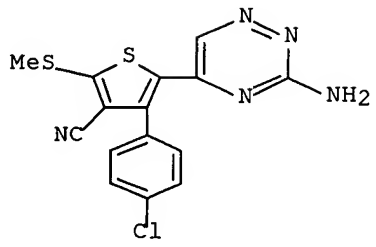
RN 473532-20-6 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-methylphenyl)-2-(methylthio)-5-[2-(phenylamino)-4-pyridinyl]- (CA INDEX NAME)



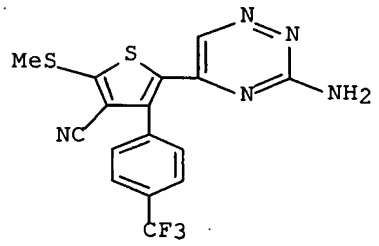
RN 473532-39-7 CAPLUS
CN Benzoic acid, 4-[2-(3-amino-1,2,4-triazin-5-yl)-4-cyano-5-(methylthio)-3-thienyl]- (CA INDEX NAME)



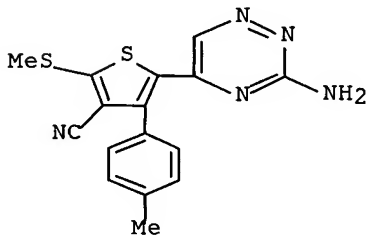
RN 473532-40-0 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-4-(4-chlorophenyl)-2-(methylthio)- (CA INDEX NAME)



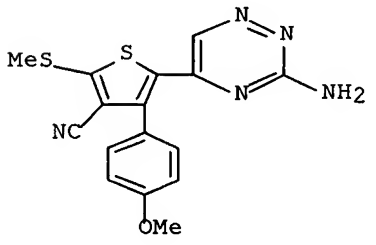
RN 473532-41-1 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-2-(methylthio)-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



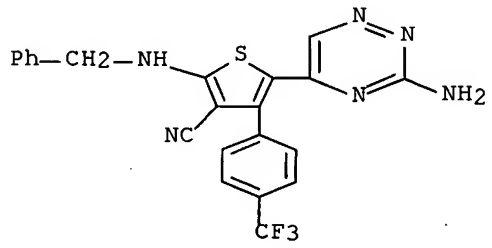
RN 473532-42-2 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-4-(4-methylphenyl)-2-(methylthio)- (CA INDEX NAME)



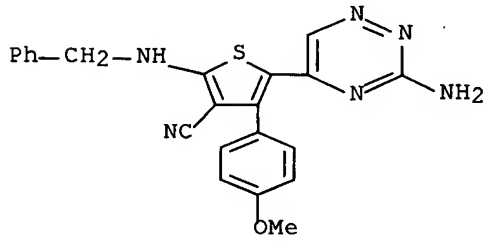
RN 473532-44-4 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-4-(4-methoxyphenyl)-2-(methylthio)- (CA INDEX NAME)



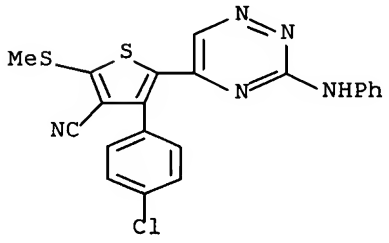
RN 473532-45-5 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-2-[(phenylmethyl)amino]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



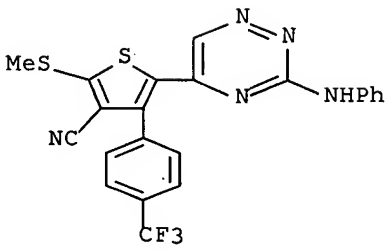
RN 473532-47-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(3-amino-1,2,4-triazin-5-yl)-4-(4-methoxyphenyl)-2-[(phenylmethyl)amino]- (CA INDEX NAME)



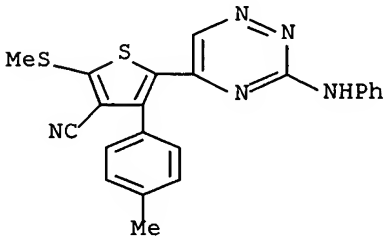
RN 473532-48-8 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-chlorophenyl)-2-(methylthio)-5-[3-(phenylamino)-1,2,4-triazin-5-yl]- (CA INDEX NAME)



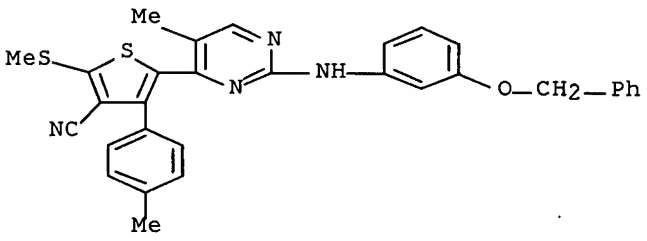
RN 473532-50-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-(methylthio)-5-[3-(phenylamino)-1,2,4-triazin-5-yl]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



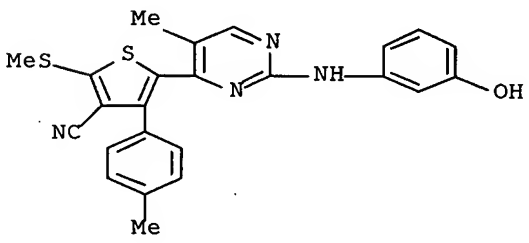
RN 473532-52-4 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-methylphenyl)-2-(methylthio)-5-[3-(phenylamino)-1,2,4-triazin-5-yl]- (CA INDEX NAME)



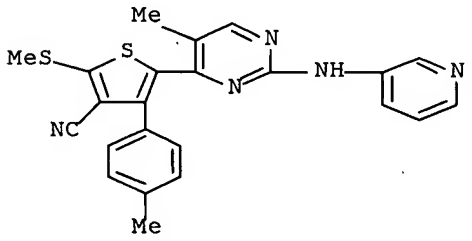
RN 473532-82-0 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-methylphenyl)-5-[5-methyl-2-[[3-(phenylmethoxy)phenyl]amino]-4-pyrimidinyl]-2-(methylthio)- (CA INDEX NAME)



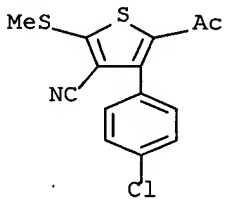
RN 473532-83-1 CAPLUS
CN 3-Thiophenecarbonitrile, 5-[2-[(3-hydroxyphenyl)amino]-5-methyl-4-pyrimidinyl]-4-(4-methylphenyl)-2-(methylthio)- (CA INDEX NAME)



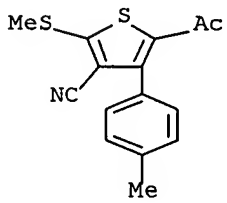
RN 473532-84-2 CAPLUS
CN 3-Thiophenecarbonitrile, 4-(4-methylphenyl)-5-[5-methyl-2-(3-pyridinylamino)-4-pyrimidinyl]-2-(methylthio)- (CA INDEX NAME)



IT 63244-11-1P, 5-Acetyl-2-(methylsulfanyl)-4-(4-chlorophenyl)thiophene-3-carbonitrile 473530-69-7P, 5-Acetyl-2-(methylsulfanyl)-4-(4-methylphenyl)thiophene-3-carbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of thienyl-substituted pyrimidinyl, pyridinyl and triazinyl amines as inhibitors of JNK and other protein kinases)
RN 63244-11-1 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-chlorophenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)



RN 473530-69-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-methylphenyl)-2-(methylthio)- (CA INDEX NAME)



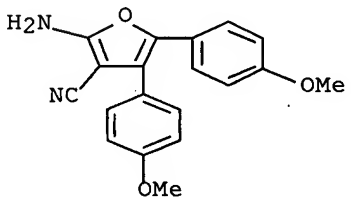
L13 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:737353 CAPLUS Full-text

DOCUMENT NUMBER: 138:265139
TITLE: Synthesis and acetylcholinesterase/butyrylcholinestera se inhibition activity of 4-amino-2,3-diaryl-5,6,7,8-tetrahydrofuro(and thieno)[2,3-b]-quinolines, and 4-amino-5,6,7,8,9-pentahydro-2,3-diphenylcyclohepta[e]furo(and thieno)-[2,3-b]pyridines
AUTHOR(S): Marco, Jose L.; De los Rios, Cristobal; Carreiras, Maria C.; Banos, Josep E.; Badia, Albert; Vivas, Nuria M.
CORPORATE SOURCE: Laboratorio de Radicales Libres, Madrid, 28006, Spain
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (2002), 335(7), 347-353
CODEN: ARPMAS; ISSN: 0365-6233
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:265139

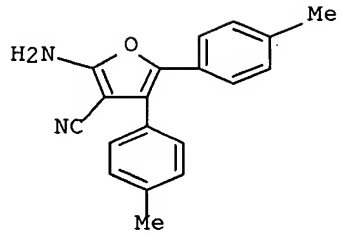
AB The acetylcholinesterase (AChE) and butyrylcholinesterase (BuChE) inhibition activities of a series of 4-amino-2,3-diaryl-5,6,7,8- tetrahydrofuro[2,3-b]quinolines (10-12)/4-amino-5,6,7,8-tetrahydro-2,3- diphenylthieno[2,3-b]quinoline (14) and 4-amino-5,6,7,8,9-pentahydro-2,3-diphenylcyclohepta[e]furo[2,3-b]pyridine (13)/4-amino-5,6,7,8,9-pentahydro-2,3-phenylcyclohepta[e]thieno[2,3-b]pyridine (15) are described. These compds. are tacrine (THA) analogs which have been prepared either from readily available 2-amino-3-cyano-4,5-diarylfurans (16-18) or from 2-amino-3-cyano-4,5-diphenylthiophene (19), via Friedlander condensation with cyclohexanone or cycloheptanone. These compds. are competitive inhibitors for acetylcholinesterase, the more potent being compound (13) which is three-fold less active than tacrine. The butyrylcholinesterase inhibition activity is significant only in some compds. which are ten-fold less active than tacrine. It is found that the some products strongly inhibit acetylcholinesterase, and show excellent selectivity regarding butyrylcholinesterase.

IT 94556-80-6 187793-06-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and acetylcholinesterase/butyrylcholinesterase inhibition activity of tacrine analogs in relation to structure)

RN 94556-80-6 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



RN 187793-06-2 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methylphenyl)- (CA INDEX NAME)



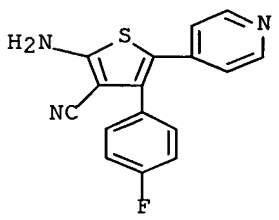
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:583531 CAPLUS Full-text
DOCUMENT NUMBER: 138:313877
TITLE: Design, synthesis and bioactivities of novel diarylthiophenes: inhibitors of tumor necrosis factor-α (TNF-α) production
AUTHOR(S): Fujita, Masakazu; Hirayama, Tetsuya; Ikeda, Naoko
CORPORATE SOURCE: Pharmaceutical Research Laboratories, Nikken Chemicals Co., Ltd., Saitama-shi, Saitama, 330-0835, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2002), 10(10), 3113-3122
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:313877

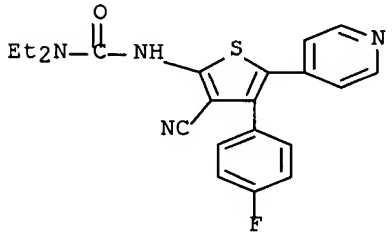
AB The design, synthesis and SAR of novel diarylthiophene derivs. were performed. These compds. were designed by structural hybridization of TNF-α production inhibitors bearing 4-fluorophenyl and 4-pyridyl groups such as FR133605, FR167653 and SB210313, and 6-acetyl-3-ethoxycarbonyl- 4,5,6,7-tetrahydrothieno[2,3-c]pyridine found previously by us. As a result, several compds. were more potent in vitro than FR133605 against TNF-α production stimulated with lipopolysaccharide.

IT 512786-12-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(design, synthesis and bioactivities of novel diarylthiophenes as inhibitors of tumor necrosis factor-α production)

RN 512786-12-8 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-4-(4-fluorophenyl)-5-(4-pyridinyl)- (CA INDEX NAME)

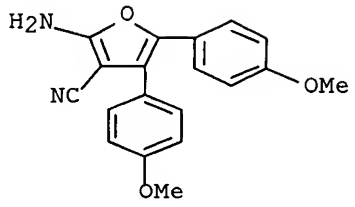


IT 512786-19-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(design, synthesis and bioactivities of novel diarylthiophenes as inhibitors of tumor necrosis factor-α production)
RN 512786-19-5 CAPLUS
CN Urea, N'-[3-cyano-4-(4-fluorophenyl)-5-(4-pyridinyl)-2-thienyl]-N,N-diethyl- (CA INDEX NAME)

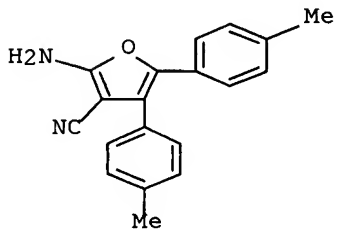


REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:251296 CAPLUS Full-text
DOCUMENT NUMBER: 137:210405
TITLE: Novel tacrine derivatives that block neuronal calcium channels
AUTHOR(S): de los Rios, Cristobal; Marco, Jose L.; Carreiras, Maria D. C.; Chinchon, P. M.; Garcia, Antonio G.; Villarroya, Mercedes
CORPORATE SOURCE: Facultad de Medicina, Departamento de Farmacologia, Instituto Teofilo Hernando, Universidad Autonoma de Madrid, Madrid, 28029, Spain
SOURCE: Bioorganic & Medicinal Chemistry (2002), 10(6), 2077-2088
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:210405
AB A new series of tacrine (9-amino-1,2,3,4-tetrahydroacridine) derivs. were synthesized and their effects on 45Ca2+ entry into bovine adrenal chromaffin cells stimulated with dimethylphenylpiperazinium (DMPP) or K+, studied. In general, the tacrine derivs. were much more efficacious and potent in blocking DMPP-mediated 45Ca2+ uptake (and hence nAChRs), than K+-evoked 45Ca2+ uptake (and hence voltage-dependent Ca2+ channels). The fact that these derivs. did not produce full blockade of DMPP-induced 45Ca2+ entry into the cells suggests that they behave as non-competitive inhibitors of nAChR. Possible structure-activity relationships are discussed.
IT 94556-80-6 187793-06-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(tacrine derivs. that block neuronal calcium channels)
RN 94556-80-6 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



RN 187793-06-2 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methylphenyl)- (CA INDEX NAME)



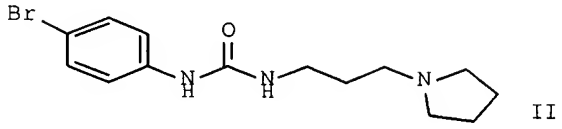
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:338479 CAPLUS Full-text
DOCUMENT NUMBER: 134:353175
TITLE: Preparation of amides and ureas as activators of soluble guanylate cyclase
INVENTOR(S): Selwood, David; Glen, Robert; Reynolds, Karen; Wishart, Grant
PATENT ASSIGNEE(S): University College London, UK
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032604	A1	20010510	WO 2000-GB4249	20001106 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2389773	A1	20010510	CA 2000-2389773	20001106 <--
EP 1237849	A1	20020911	EP 2000-973061	20001106 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

JP 2003513064	T	20030408	JP 2001-534758		20001106 <--
PRIORITY APPLN. INFO.:			GB 1999-26286	A	19991105
			US 2000-201382P	P	20000502
			WO 2000-GB4249	W	20001106

OTHER SOURCE(S): MARPAT 134:353175
GI



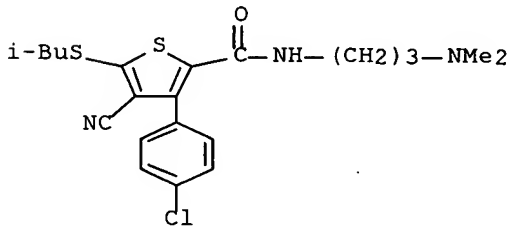
II

AB The title compds. R4PZNR1R2 [I; R1, R2 = alkyl; R1R2 together form alkylene; Z = alkylene; P = a direct bond, X, Y, W, XY, YW, XYW (wherein W = O, S, NR3; R3 = H, alkyl; Y = UV; V = a direct bond, alkylene; U = CS, CO, SO2, C(:NR); R = H, OH, alkyl; X = O, NR6; R6 = H, alkyl, alkenyl, etc.); R4 = alkyl, alkenyl, alkynyl, etc.], useful in the activation of soluble guanylate cyclase, were prepared E.g., synthesis of the urea II, starting with 4-bromoaniline and 1-(3-aminopropyl)pyrrolidine, was given. Biol. data for compds. I (e.g., IC50 for inhibition of platelet aggregation) were presented.

IT 338980-20-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amides and ureas as activators of soluble guanylate cyclase)

RN 338980-20-4 CAPLUS

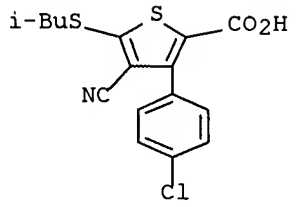
CN 2-Thiophenecarboxamide, 3-(4-chlorophenyl)-4-cyano-N-[3-(dimethylamino)propyl]-5-[(2-methylpropyl)thio]- (CA INDEX NAME)



IT 338981-31-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amides and ureas as activators of soluble guanylate cyclase)

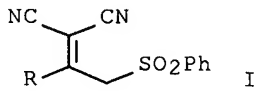
RN 338981-31-0 CAPLUS

CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-[(2-methylpropyl)thio]- (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

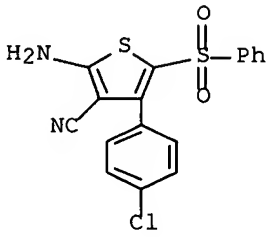
L13 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:135785 CAPLUS Full-text
DOCUMENT NUMBER: 132:279089
TITLE: A novel synthesis of sulfone systems as antimicrobial agents
AUTHOR(S): Erian, Ayman W.; Issac, Yvette A.; Sherif, Sherif M.
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Cairo University, Giza, Egypt
SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (2000), 55(1), 127-132
CODEN: ZNBSEN; ISSN: 0932-0776
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:279089
GI



I

AB Phenyldicyanosulfonylpropenes I (R = Ph, 4-ClC6H4) were prepared to serve as building blocks in the synthesis of polyfunctionally substituted carbocyclic and heterocyclic sulfone systems. Chemical and spectroscopic evidence for the structures of the newly synthesized compds. are described. Some of the obtained compds. were tested for their antimicrobial activity.

IT 263702-64-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn of sulfones as antimicrobial agents)
RN 263702-64-3 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-4-(4-chlorophenyl)-5-(phenylsulfonyl)- (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:217531 CAPLUS Full-text
DOCUMENT NUMBER: 128:276861
TITLE: Electrooptical and photonic devices
INVENTOR(S): Nordmann, Jens; Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger; Bauer, Monika; Krueger, Hartmut; Bauer, Joerg; Guenzelmann, Cornelius; Hartmann, Horst; Walter, Andreas
PATENT ASSIGNEE(S): Siemens A.-G., Germany; BASF A.-G.; Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V.
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

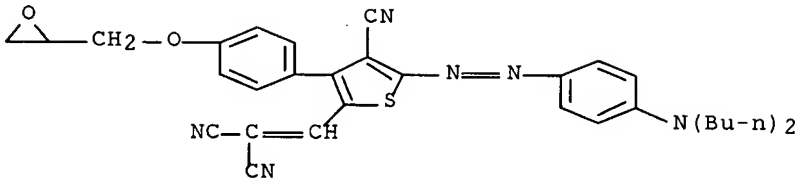
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19639445	A1	19980402	DE 1996-19639445	19960925 <--
PRIORITY APPLN. INFO.:			DE 1996-19639445	19960925

AB Electrooptical and photonic devices comprising an active layer situated between two buffer layers and comprising an oriented, cross-linked nonlinear optical polymer are described in which the polymer is a polyadduct of a nonlinearly optically active copolymer which has ≥1 glycidyl or glycidyl ether groups which react with cyanate groups and ≥1 organic di- or polycyanate. Methods for fabricating the devices entailing sequential formation of the layers making them up are also described.

IT 205652-77-3P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electrooptical and photonic devices using polycyanurates)
RN 205652-77-3 CAPLUS
CN Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with [[4-cyano-5-[[4-(dibutylamino)phenyl]azo]-3-[4-(oxiranylmethoxy)phenyl]-2-thienyl]methylene]propanedinitrile (9CI) (CA INDEX NAME)

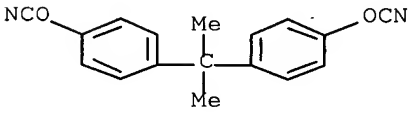
CM 1

CRN 205652-75-1
CMF C32 H32 N6 O2 S



CM 2

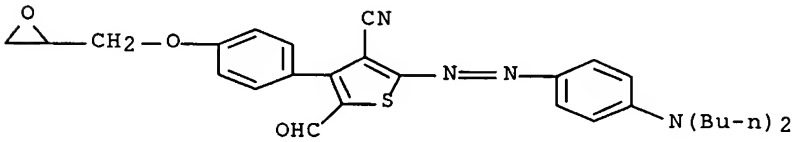
CRN 1156-51-0
CMF C17 H14 N2 O2



IT 205652-78-4P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electrooptical and photonic devices using polycyanurates)
RN 205652-78-4 CAPLUS
CN Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-[4-(oxiranylmethoxy)phenyl]-3-thiophenecarbonitrile (9CI) (CA INDEX NAME)

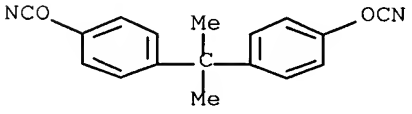
CM 1

CRN 205652-74-0
CMF C29 H32 N4 O3 S



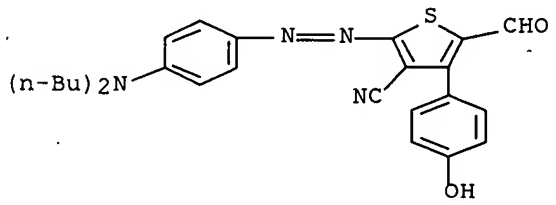
CM 2

CRN 1156-51-0
CMF C17 H14 N2 O2

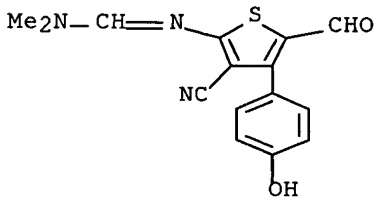


IT 173026-46-5P 173026-50-1P 173026-51-2P
205652-74-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(electrooptical and photonic devices using polycyanurates)

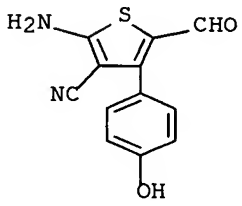
RN 173026-46-5 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



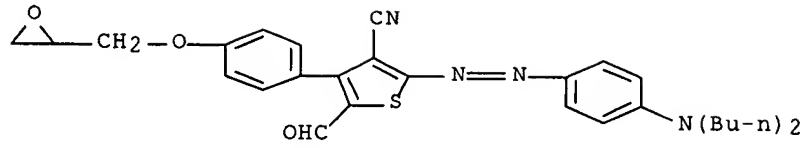
RN 173026-50-1 CAPLUS
CN Methanimidamide, N'-[3-cyano-5-formyl-4-(4-hydroxyphenyl)-2-thienyl]-N,N-dimethyl- (CA INDEX NAME)



RN 173026-51-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-formyl-4-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 205652-74-0 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-[4-(oxiranylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



L13 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:208611 CAPLUS Full-text
DOCUMENT NUMBER: 128:276858
TITLE: Electrooptical and photonic devices
INVENTOR(S): Nordmann, Jens; Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger; Bauer, Monika; Krueger, Hartmut; Bauer, Joerg; Guenzelmann, Cornelius
PATENT ASSIGNEE(S): Siemens A.-G., Germany; BASF A.-G.; Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung e.V.
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

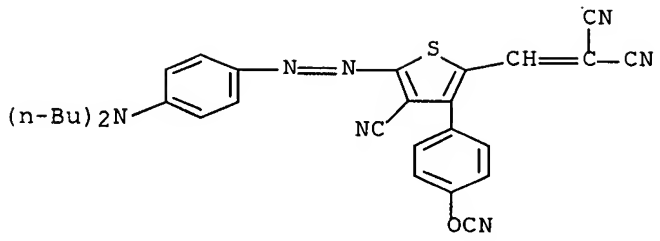
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19639447	A1	19980326	DE 1996-19639447	19960925 <--
PRIORITY APPLN. INFO.:			DE 1996-19639447	19960925

AB Electrooptical and photonic devices comprising an active layer situated between two buffer layers and comprising an oriented, cross-linked nonlinear optical polymer are described in which the polymer is a polyadduct of a nonlinearly optically active copolymer which has cyanate groups and ≥1 organic di- or polycyanate. Methods for fabricating the devices entailing sequential formation of the layers making them up are also described.

IT 205507-01-3P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electrooptical and photonic devices using polycyanurates)
RN 205507-01-3 CAPLUS
CN Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with 4-[4-cyano-5-[[4-(dibutylamino)phenyl]azo]-2-(2,2-dicyanoethenyl)-3-thienyl]phenyl cyanate (9CI) (CA INDEX NAME)

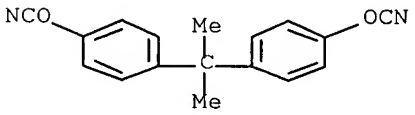
CM 1

CRN 205507-00-2
CMF C30 H27 N7 O S

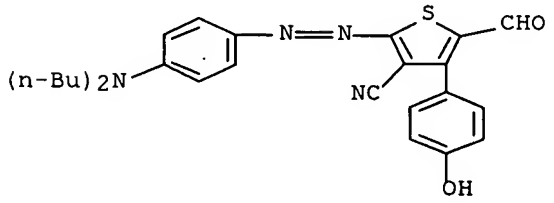


CM 2

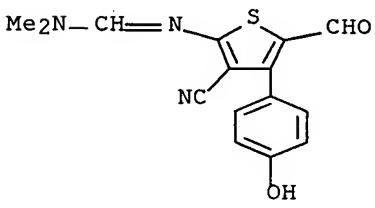
CRN 1156-51-0
CMF C17 H14 N2 O2



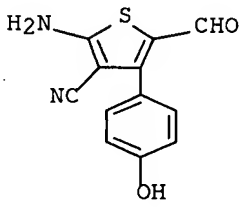
IT 173026-46-5P 173026-50-1P 173026-51-2P
205506-99-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(electrooptical and photonic devices using polycyanurates)
RN 173026-46-5 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



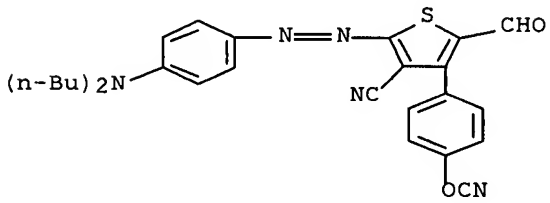
RN 173026-50-1 CAPLUS
CN Methanimidamide, N'-[3-cyano-5-formyl-4-(4-hydroxyphenyl)-2-thienyl]-N,N-dimethyl- (CA INDEX NAME)



RN 173026-51-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-formyl-4-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 205506-99-6 CAPLUS
CN Cyanic acid, 4-[4-cyano-5-[[4-(dibutylamino)phenyl]azo]-2-formyl-3-thienyl]phenyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:208610 CAPLUS Full-text
DOCUMENT NUMBER: 128:276857
TITLE: Electrooptical and photonic devices
INVENTOR(S): Nordmann, Jens; Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger; Bauer, Monika; Krueger, Hartmut; Bauer, Joerg; Guenzelmann, Cornelius; Hartmann, Horst; Flaig, Ronald
PATENT ASSIGNEE(S): Siemens A.-G., Germany; BASF A.-G.; Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung e.V.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19639446	A1	19980326	DE 1996-19639446	19960925 <--
PRIORITY APPLN. INFO.:			DE 1996-19639446	19960925

AB Electrooptical and photonic devices comprising an active layer situated between two buffer layers and comprising an oriented, cross-linked nonlinear optical polymer are described in which the polymer is a polyadduct of a nonlinearly optically active copolymer which has ≥1 hydroxy groups which react

with cyanate groups and ≥1 organic di- or polycyanate. Methods for fabricating the devices entailing sequential formation of the layers making them up are also described.

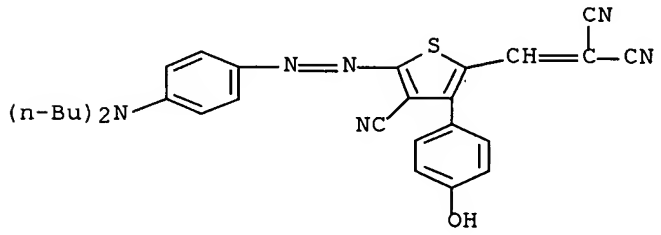
IT 205506-89-4P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electrooptical and photonic devices using polycyanurates)

RN 205506-89-4 CAPLUS

CN Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with [[4-cyano-5-[[4-(dibutylamino)phenyl]azo]-3-(4-hydroxyphenyl)-2-thienyl]methylene]propanedinitrile (9CI) (CA INDEX NAME)

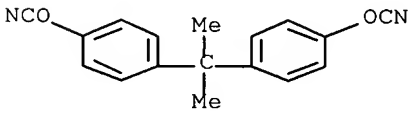
CM 1

CRN 205506-88-3
CMF C29 H28 N6 O S



CM 2

CRN 1156-51-0
CMF C17 H14 N2 O2



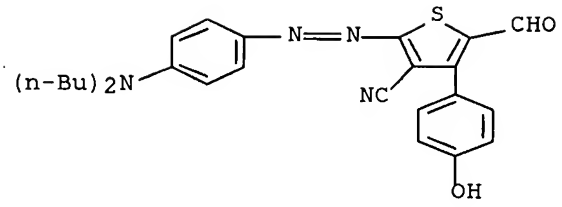
IT 205506-87-2P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electrooptical and photonic devices using polycyanurates)

RN 205506-87-2 CAPLUS

CN Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-(4-hydroxyphenyl)-3-thiophenecarbonitrile (9CI) (CA INDEX NAME)

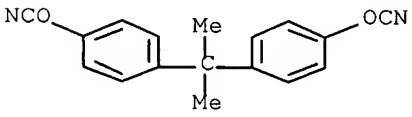
CM 1

CRN 173026-46-5
CMF C26 H28 N4 O2 S

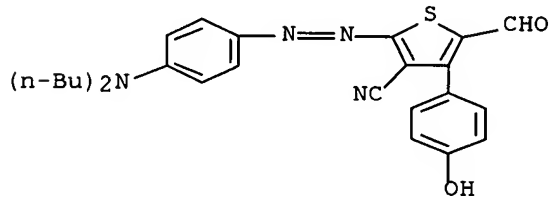


CM 2

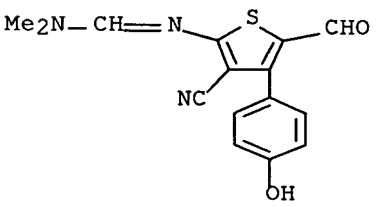
CRN 1156-51-0
CMF C17 H14 N2 O2



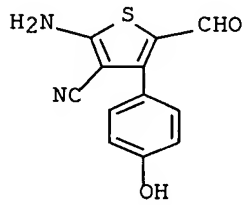
IT 173026-46-5P 173026-50-1P 173026-51-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(electrooptical and photonic devices using polycyanurates)
RN 173026-46-5 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 173026-50-1 CAPLUS
CN Methanimidamide, N'-[3-cyano-5-formyl-4-(4-hydroxyphenyl)-2-thienyl]-N,N-dimethyl- (CA INDEX NAME)



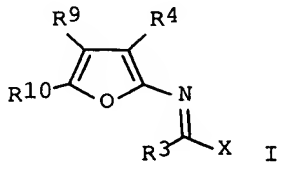
RN 173026-51-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-formyl-4-(4-hydroxyphenyl)- (CA INDEX NAME)



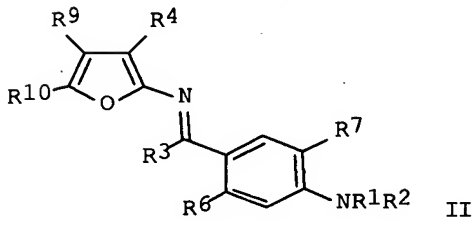
L13 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:761878 CAPLUS Full-text
DOCUMENT NUMBER: 128:36078
TITLE: Dye-donor element for use in thermal transfer printing
INVENTOR(S): Vanmaele, Luc
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 808721	A1	19971126	EP 1996-201374	19960521 <--
R: DE, FR, GB				
JP 10129131	A	19980519	JP 1997-145837	19970520 <--

PRIORITY APPLN. INFO.: EP 1996-201374 A 19960521
OTHER SOURCE(S): MARPAT 128:36078
GI



I



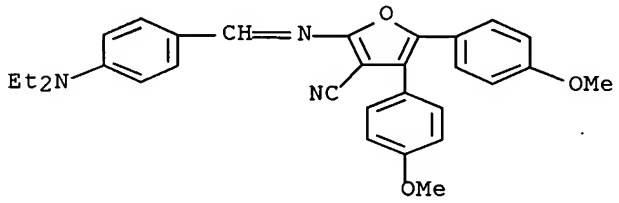
II

AB A dye-donor element comprises a support having thereon a dye layer comprising a polymeric binder and ≥1 dye having the formula I, wherein X represents an aromatic or hetero-aromatic ring system; R3 represents H, cyano, COR13, CO2R13, CONR14R15 or SO216, an alkyl group, an alkenyl group, an alkynyl group, an aromatic or heteroarom. ring; R4 represents H, CN, NO2, halogen, COR19, CO2R19, CONR20R21, SO2R22, POR23R24, an aryl group, an alkyl group, an alkenyl group, an alkynyl group; R9, R10 each independently represents H, an alkyl group, a heterocyclic ring, an alkenyl group, an alkynyl group, an aryl group or R9 and R10 or R9 and R4 together with the atoms to which they are attached represent the necessary atoms to form a ring, including a heterocyclic ring; R13, R14, R15 each independently represents H, an alkyl group, an alkenyl group, an alkynyl group, a heterocyclic ring or R14 and R15 together with the atoms to which they are attached represent the necessary atoms to form a 5- or 6- membered ring. R16 represents OH, an alkoxy group, a heterocyclic group, an aryloxy group, NR17R18, an aryl group or an alkyl group, an alkenyl group or an alkynyl group; R17, R18 each independently represents H, an alkyl group, an alkenyl group, an alkynyl group, an aryl group, a heterocyclic ring or R17 and R18 together with the atoms to which they are attached represent the necessary atoms to form a 5- or 6-membered ring; R19, R20, and R21 represent one of the meanings given to R13; R22 represents one of the meanings given to R16; R23, R24 each independently represents one of the meaning given to R16 or R23 and R24 together with the atoms to which they are attached represent the necessary atoms to form a ring system. Thus, a dye solution contained II (R1, R2 = Et, R9, R10 = p-MeOC6H4, R3, R6, R7= H, and R4 = CN), Luran 388S, and MEK.

IT 199536-16-8 199536-17-9 199536-21-5
RL: TEM (Technical or engineered material use); USES (Uses)
(dyes; thermal transfer printing inks contg dyes and binders)

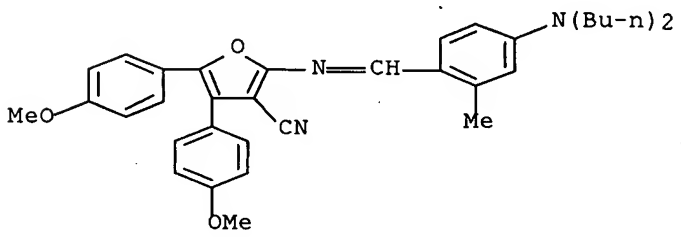
RN 199536-16-8 CAPLUS

CN 3-Furancarbonitrile, 2-[[[4-(diethylamino)phenyl]methylene]amino]-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)

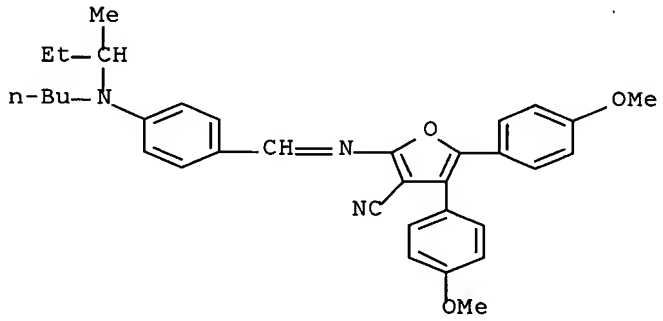


RN 199536-17-9 CAPLUS

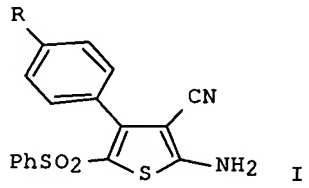
CN 3-Furancarbonitrile, 2-[[[4-(dibutylamino)-2-methylphenyl]methylene]amino]-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



RN 199536-21-5 CAPLUS
CN 3-Furancarbonitrile, 2-[[[4-[butyl(1-methylpropyl)amino]phenyl]methylene]amino]-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



L13 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:619483 CAPLUS Full-text
DOCUMENT NUMBER: 127:331458
TITLE: Syntheses with heterocyclic β-enamino nitriles. An expeditious synthetic approach to polyfunctionally substituted 5-phenyl-sulfonylthiophenes and their fused derivatives
AUTHOR(S): Sherif, S. M.; Hussein, A. M.
CORPORATE SOURCE: Faculty Science, Cairo University, Giza, Egypt
SOURCE: Monatshefte fuer Chemie (1997), 128(6/7), 687-696
CODEN: MOCMB7; ISSN: 0026-9247
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 127:331458
GI

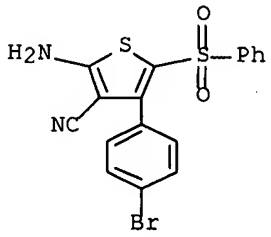


I

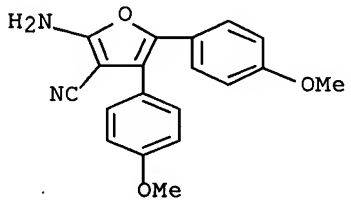
AB PhSO2CH2COC6H4-4-R (R = H, Br) reacts with a mixture of elemental S and CH2(CN)2 to yield the corresponding thiophenecarbonitriles I. Compound I (R = H) could be annelated to the corresponding thieno[2,3-d]pyrimidine and thieno[2,3-c]pyrazole (II) upon reaction with the N nucleophiles NH2CN and NH2OH.HCl, resp. The applicability and synthetic potency of II to develop a facile convenient route to polyfunctional thieno[2',3':3,4]pyrazolo[1,5-a]pyrimidines is reported.

IT 197861-64-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (phenylsulfonyl)thiophenes as heterocyclic enamino nitriles and their fused derivs.)

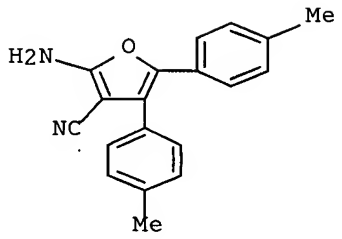
RN 197861-64-6 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-4-(4-bromophenyl)-5-(phenylsulfonyl)- (CA INDEX NAME)



L13 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:81521 CAPLUS Full-text
DOCUMENT NUMBER: 126:199544
TITLE: First synthesis of 4H-furo[3,2-f]pyrrolo[1,2-a][1,4]diazepines
AUTHOR(S): Feng, Xiao; Lancelot, Jean-Charles; Prunier, Herve; Rault, Sylvain
CORPORATE SOURCE: Cent. Etudes Rech. Med. Normandie, U.F.R. Sci. Pharmaceutiques-1, Caen, 14032, Fr.
SOURCE: Journal of Heterocyclic Chemistry (1996), 33(6), 2007-2011
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthetic pathway leading to 4-H-furo[3,2-f]pyrrolo[1,2- a][1,4]diazepines is described in five steps starting from 2-hydroxyketones via 2-amino-3-furonitriles.
IT 94556-80-6P 187793-06-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of 4H-furo[3,2-f]pyrrolo[1,2-a][1,4]diazepines)
RN 94556-80-6 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



RN 187793-06-2 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methylphenyl)- (CA INDEX NAME)

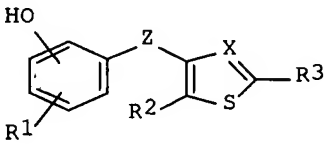


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

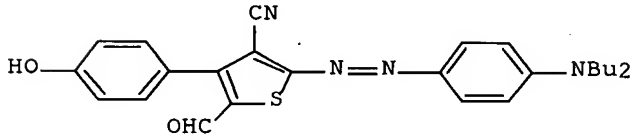
L13 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:996915 CAPLUS Full-text
DOCUMENT NUMBER: 124:117081
TITLE: Preparation of 2-(hydroxyphenyl)-5-aryldiazothiophenecarboxaldehydes and analogs as nonlinear optical materials and monomers
INVENTOR(S): Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4412983	A1	19951019	DE 1994-4412983	19940415 <--
WO 9528396	A1	19951026	WO 1995-EP1290	19950407 <--
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 755391	A1	19970129	EP 1995-914349	19950407 <--
R: CH, DE, FR, GB, LI				
JP 09511995	T	19971202	JP 1995-526680	19950407 <--
US 5777089	A	19980707	US 1996-722141	19961015 <--
PRIORITY APPLN. INFO.:			DE 1994-4412983 A	19940415
			WO 1995-EP1290 W	19950407

OTHER SOURCE(S): MARPAT 124:117081
GI



I

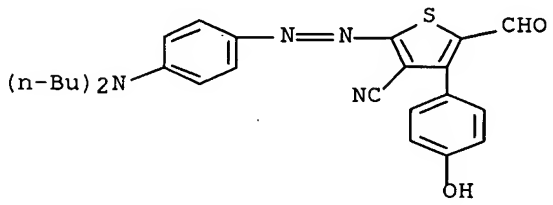


II

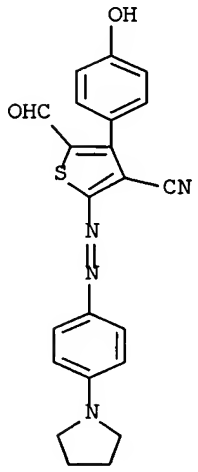
AB Title compds. [I; R1,R2 = H, halo, alkyl, alkoxy, CHO, etc.; R3 = NH2, N:NZ1NR8R9, etc.; R8,R9 = H, (cyclo)alkyl; NR8R9 = heterocyclyl; X = N, CR4; R4 = H, cyano, CO2H, etc.; Z = bond, SO0-2, O, (alkyl)imino, etc.; Z1 = (un)substituted 1,4-phenylene] were prepared Thus, 4-(HO)C6H4COMe was condensed with CH2(CN)2 and the cyclized product converted in 3 steps to title compd II. Spectroscopic data for 3 prepared I were given.

IT 173026-46-5P 173026-47-6P 173026-48-7P
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of 2-(hydroxyphenyl)-5-aryldiazothiophenecarboxaldehydes and analogs as nonlinear optical materials and monomers)

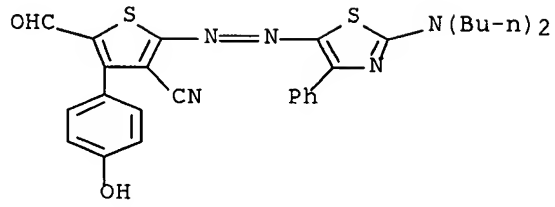
RN 173026-46-5 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[4-(dibutylamino)phenyl]azo]-5-formyl-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



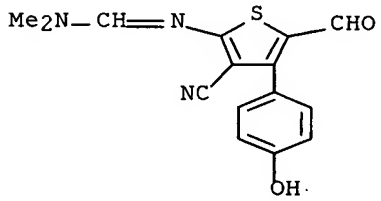
RN 173026-47-6 CAPLUS
CN 3-Thiophenecarbonitrile, 5-formyl-4-(4-hydroxyphenyl)-2-[[4-(1-pyrrolidinyl)phenyl]azo]- (9CI) (CA INDEX NAME)



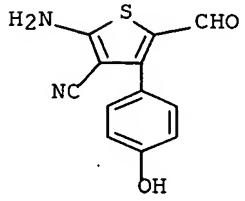
RN 173026-48-7 CAPLUS
CN 3-Thiophenecarbonitrile, 2-[[2-(dibutylamino)-4-phenyl-5-thiazolyl]azo]-5-formyl-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



IT 173026-50-1P 173026-51-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-(hydroxyphenyl)-5-aryldiazothiophenecarboxaldehydes and analogs as nonlinear optical materials and monomers)
RN 173026-50-1 CAPLUS
CN Methanimidamide, N'-[3-cyano-5-formyl-4-(4-hydroxyphenyl)-2-thienyl]-N,N-dimethyl- (CA INDEX NAME)



RN 173026-51-2 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-5-formyl-4-(4-hydroxyphenyl)- (CA INDEX NAME)



L13 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:537697 CAPLUS Full-text
DOCUMENT NUMBER: 123:83235
TITLE: Synthesis of furo[2,3-d]pyrimidines and furo[2,3-b]pyridines
AUTHOR(S): Ali, M. M.; Zahran, M. A.; Ammar, Y. A.; Mohamed, Y. A.; Seleim, A. T.
CORPORATE SOURCE: Fac. Science, Al-Azhar Univ., Nasr, Egypt
SOURCE: Indian Journal of Heterocyclic Chemistry (1995), 4(3), 191-4
CODEN: IJCHEI; ISSN: 0971-1627
PUBLISHER: Lucknow University, Dep. of Chemistry

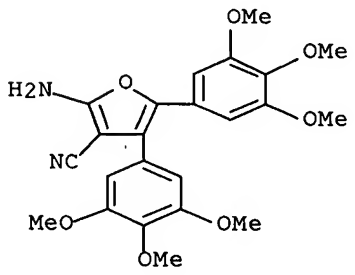
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Condensation of 2-amino-3-cyano-4,5-bis(3,4,5-trimethoxyphenyl)furan (I) with isothiocyanates, urea or thiourea, and carbon disulfide furnished furopyrimidine derivs., resp. Interaction of I or 2-amino-3-cyano-4,5-diphenylfuran (II) with formamide and Et acetoacetate afforded furopyridine derivs., resp. 4-Aminofuropyrmidines have been converted into 4-imide, diacetyl, and benzamide derivs. Interaction of II with succinic anhydride gave the amide derivative, which cyclized to tetrahydrofuranone derivative

IT 165400-59-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of furo[2,3-d]pyrimidines, furo[2,3-b]pyridines, and related compds.)

RN 165400-59-9 CAPLUS

CN 3-Furancarbonitrile, 2-amino-4,5-bis(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)



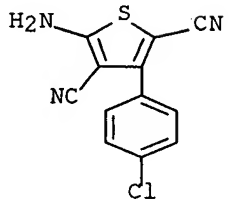
L13 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:106002 CAPLUS Full-text
DOCUMENT NUMBER: 116:106002
TITLE: Cyclization of 3-(alkylthio)-1,1,3-tricyano-1-propenes to thiophenes
AUTHOR(S): Reux, D.; Pochat, F.
CORPORATE SOURCE: Lab. Synth. Org., Univ. Rennes I, Rennes, F-35042, Fr.
SOURCE: Sulfur Letters (1991), 13(5), 197-202
CODEN: SULED2; ISSN: 0278-6117
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 116:106002

AB While 1,1,3-tricyanopropenes undergo cyclization to pyridines in acidic medium, the cyclization of 3-alkylthio-1,1,3-tricyanopropenes leads exclusively to thiophenes.

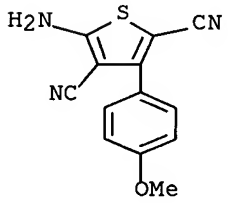
IT 139260-20-1P 139260-21-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 139260-20-1 CAPLUS

CN 2,4-Thiophenedicarbonitrile, 5-amino-3-(4-chlorophenyl)- (9CI) (CA INDEX NAME)



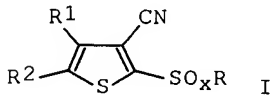
RN 139260-21-2 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 5-amino-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:528820 CAPLUS Full-text
DOCUMENT NUMBER: 109:128820
TITLE: Preparation of 3-cyano-4-arylthiophenes as herbicides
INVENTOR(S): Abdulla, Riaz Fazal; Morris, Kenneth William; Williams, James Curtis, Jr.
PATENT ASSIGNEE(S): Eli Lilly and Co., USA
SOURCE: Eur. Pat. Appl., 42 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273602	A1	19880706	EP 1987-310603	19871202 <--
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 63159380	A	19880702	JP 1987-310798	19871205 <--
PRIORITY APPLN. INFO.:			US 1986-938220 A	19861205
OTHER SOURCE(S):	MARPAT 109:128820			

GI

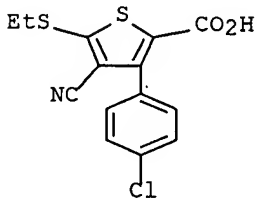


AB The title compds. [I; R = C1-3 alkyl; R1 = (un)substituted Ph; R2 = H, Cl; x = 0-2] were prepared HSCH2CO2Me and 4-ClC6H4COC(CN):C(MeS)2 were heated in EtOH

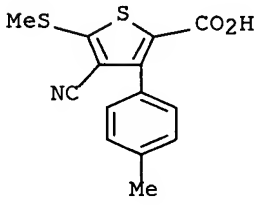
in the presence of Et3N to give Me 4-(4-chlorophenyl)-3-cyano-2- (methylthio)-5-thiophencarboxylate. The latter was saponified to give the carboxylic acid which was treated with quinoline and Cu bronze to give I (R = Me, R1 = 4-ClC6H4, R2 = H, x = 0) (II). In tomatoes, 15 lb II/acre gave 100% preemergence control of crabgrass and redroot pigweed.

IT 116492-91-2P 116492-95-6P 116493-03-9P
116493-06-2P 116493-07-3P 116525-65-6P
116525-66-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decarboxylation of)

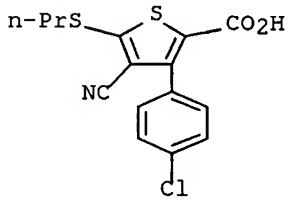
RN 116492-91-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(ethylthio)-(9CI) (CA INDEX NAME)



RN 116492-95-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(4-methylphenyl)-5-(methylthio)-(9CI) (CA INDEX NAME)

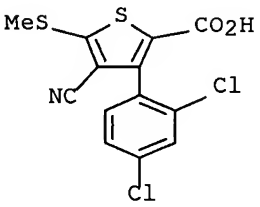


RN 116493-03-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(propylthio)-(9CI) (CA INDEX NAME)

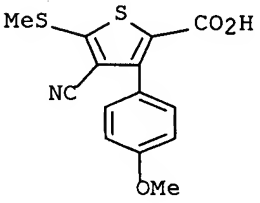


RN 116493-06-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(2,4-dichlorophenyl)-5-(methylthio)-

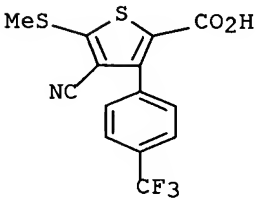
(9CI) (CA INDEX NAME)



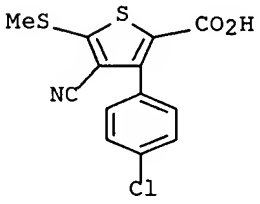
RN 116493-07-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(4-methoxyphenyl)-5-(methylthio)-
(9CI) (CA INDEX NAME)



RN 116525-65-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-(methylthio)-3-[4-
(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

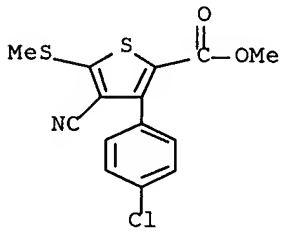


RN 116525-66-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(methylthio)-
(CA INDEX NAME)

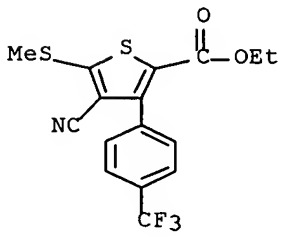


IT 63244-05-3P 116492-89-8P 116492-90-1P
116492-94-5P 116493-02-8P 116493-05-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of)

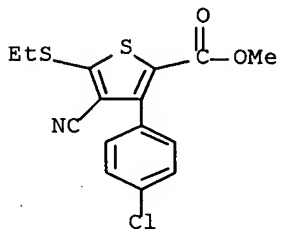
RN 63244-05-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



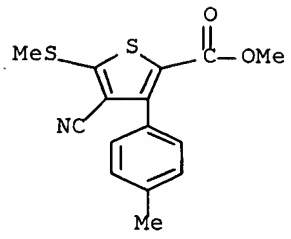
RN 116492-89-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-(methylthio)-3-[4-(trifluoromethyl)phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



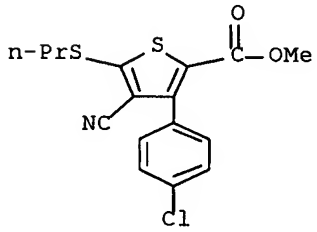
RN 116492-90-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(ethylthio)-, methyl ester (9CI) (CA INDEX NAME)



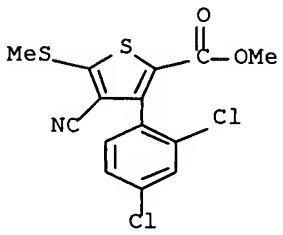
RN 116492-94-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(4-methylphenyl)-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



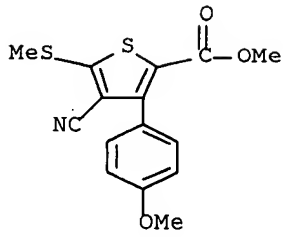
RN 116493-02-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(propylthio)-, methyl ester (9CI) (CA INDEX NAME)



RN 116493-05-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(2,4-dichlorophenyl)-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



IT 63244-07-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(saponification of)
RN 63244-07-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(4-methoxyphenyl)-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:510245 CAPLUS Full-text
DOCUMENT NUMBER: 109:110245
TITLE: Preparation of thio compounds having fungicidal activity
INVENTOR(S): Dolman, H.; Kuipers, J.
PATENT ASSIGNEE(S): Duphar International Research B. V., Neth.
SOURCE: Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 234622	A1	19870902	EP 1987-200143	19870202 <--
EP 234622	B1	19900627		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
AT 54143	T	19900715	AT 1987-200143	19870202 <--
DK 8700765	A	19870820	DK 1987-765	19870216 <--
ZA 8701109	A	19871028	ZA 1987-1109	19870216 <--
BR 8700705	A	19871215	BR 1987-705	19870216 <--
CN 87101917	A	19880106	CN 1987-101917	19870216 <--
CN 1017243	B	19920701		
HU 45483	A2	19880728	HU 1987-597	19870216 <--
HU 204399	B	19920128		
SU 1496633	A3	19890723	SU 1987-4028996	19870216 <--
PL 154573	B1	19910830	PL 1987-264141	19870216 <--
IL 81590	A	19911121	IL 1987-81590	19870216 <--
AU 8768856	A	19870820	AU 1987-68856	19870217 <--
AU 594119	B2	19900301		
CS 268823	B2	19900411	CS 1987-1037	19870217 <--
DD 265315	A5	19890301	DD 1987-300016	19870218 <--
JP 62192353	A	19870822	JP 1987-36857	19870219 <--
US 4994485	A	19910219	US 1990-566868	19900814 <--

PRIORITY APPLN. INFO.:

NL 1986-416	A	19860219
NL 1986-1296	A	19860522
EP 1987-200143	A	19870202
US 1987-14596	B1	19870213
US 1988-175601	B1	19880329
US 1989-395220	B1	19890817

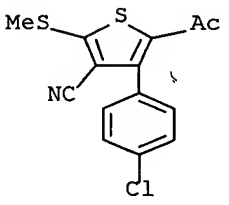
AB Title compds. ZCR1:CR2CX:C[S(O)nR]Y [I; R = (un)substituted C1-12 alkyl, C2-4 alkenyl or alkynyl, C3-4 alkadienyl, (un)substituted Ph or phenyl-C1-4-alkyl; R1 = cyano, CHO, C2-5 alkylcarbonyl or alkoxycarbonyl (un)substituted by halo, (un)substituted Bz, C1-4 alkylsulfonyl; R2 = H, halo, NH2 (un)substituted by C1-4 alkyl or C2-5 alkylcarbonyl, heterocyclic amino optionally comprising 1-2

addnl. N, O, or S atoms, C1-4 alkyl or alkoxy (un)substituted by halo or C2-5 alkylcarbonyl, (un)substituted (hetero)aryl, (hetero)aryloxy, or (hetero)arylthio; R1R2 = (un)substituted CH:CHCH:CH; X = cyano, CHO; Y = C1-4 alkylthio; Z = H, halo, NO2, C1-4 alkyl or alkoxy (un)substituted by halo; YZ = S; n = 1, 2] are prepared as agrochem. fungicides and bactericides. m-ClC6H4C(O)OOH was gradually added at 0-5° to 2-(methylthio)-3-cyano-5-acetylthiophene to give 2-(methylsulfinyl)-3-cyano-5-acetylthiophene. Wheat seed infested with Fusarium culmorum and treated with 2-(ethylsulfinyl)-3,5-dicyano-4- chlorothiophene (also prepared) at 3 g/kg seed resulted in 98% emerged healthy plants, compared to 68-75% with known substances.

IT 63244-11-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidation of)

RN 63244-11-1 CAPLUS

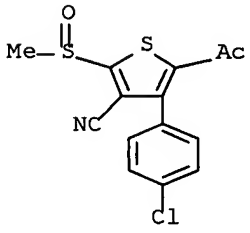
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-chlorophenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)



IT 116170-29-7P 116170-49-1P 116170-58-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as agrochem. bactericide and fungicide)

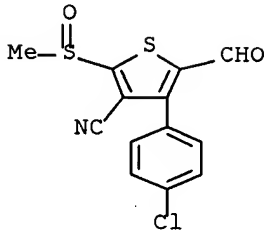
RN 116170-29-7 CAPLUS

CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-chlorophenyl)-2-(methylsulfinyl)- (9CI) (CA INDEX NAME)

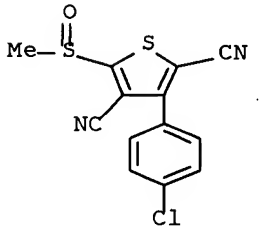


RN 116170-49-1 CAPLUS

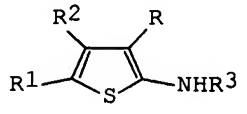
CN 3-Thiophenecarbonitrile, 4-(4-chlorophenyl)-5-formyl-2-(methylsulfinyl)- (9CI) (CA INDEX NAME)



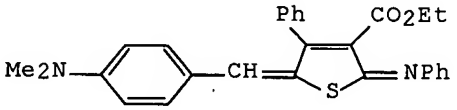
RN 116170-58-2 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 3-(4-chlorophenyl)-5-(methylsulfinyl)- (9CI) (CA INDEX NAME)



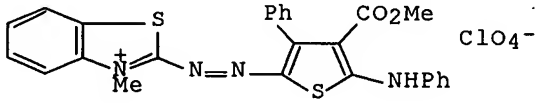
L13 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:109396 CAPLUS Full-text
DOCUMENT NUMBER: 104:109396
TITLE: 2-(Arylamino)thiophene-3-carboxylic acid derivatives
AUTHOR(S): Schaefer, H.; Jablokoff, H.; Hentschel, M.; Gewald, K.
CORPORATE SOURCE: Sekt. Chem., Tech. Univ. Dresden, Dresden, DDR-8027, Ger. Dem. Rep.
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1984), 326(6), 917-23
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 104:109396
GI



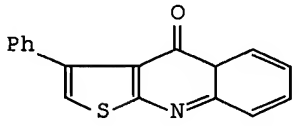
I



II



III



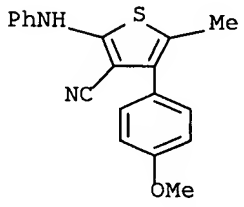
IV

AB Thirteen title compds. I (R = CO2Me, cyano; R1 = H, Me, Et; R2 = Ph, p-MeC6H4, p-MeOC6H4, Me, H; R3 = Ph, p-MeC6H4, p-MeOC6H4, m-MeC6H4) were prepared by treating I (R3 = H) with anilines. The reactions of I (R3 = aryl) were investigated. Thus, I (R = CO2Et, R1 = H, R2 = R3 = Ph) was condensed with p-(Me2N)C6H4CHO to give imine II and underwent oxidative coupling with N-methylbenzothiazol-2-one hydrazone to give the azo compound III. I (R = CO2Et, R1 = H, R2 = R3 = Ph) was cyclized by polyphosphoric acid to give the thienoquinoline IV.

IT 100005-21-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 100005-21-8 CAPLUS

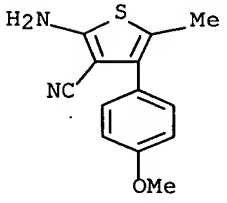
CN 3-Thiophenecarbonitrile, 4-(4-methoxyphenyl)-5-methyl-2-(phenylamino)- (9CI) (CA INDEX NAME)



IT 100005-23-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aniline)

RN 100005-23-0 CAPLUS

CN 3-Thiophenecarbonitrile, 2-amino-4-(4-methoxyphenyl)-5-methyl- (9CI) (CA INDEX NAME)



L13 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:78651 CAPLUS Full-text

DOCUMENT NUMBER: 102:78651

TITLE: Ring transformations and reaction of 2-amino-4,5-dihydrofuran-3,4-dicarbonitriles

AUTHOR(S): Aran, Vicente J.; Perez, Miguel A.; Soto, Jose L.

CORPORATE SOURCE: Dep. Quim. Org., Univ. Complutense, Madrid, Spain

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1984), (9), 2009-11
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

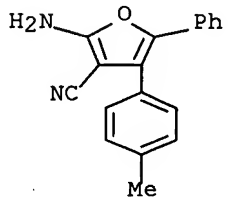
LANGUAGE: English
OTHER SOURCE(S): CASREACT 102:78651
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

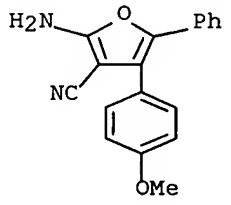
AB Thermal aromatization of dihydrofurans I (R = H, OMe, R1 = H, OMe; R = Me, Cl, R1 = H) in refluxing ethylene glycol for 15 min gave the corresponding furans II in 55-70% yield. Photooxidative rearrangement of II in MeCN for 3 days gave 65-80% pyrroles III (R = H, OMe, R1 = OMe; R = OMe, Me, R1 = H). Mild acid hydrolysis of I gave the corresponding lactones IV. Refluxing of IV (R = R1 = H) (V) in ethylene glycol for 30 min gave 55% 2,5-dihydro-2-oxo-4,5-diphenylfuran-3-carbonitrile. Furopyrroletrione VI was obtained in 59% yield by reaction of V in refluxing AcOH-H2O-H2SO4 for 3 h.

IT 14774-55-1P 14774-62-0P 94556-80-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and rearrangement of, pyrrolone by)

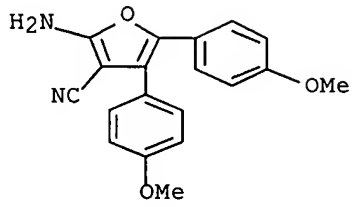
RN 14774-55-1 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-methylphenyl)-5-phenyl- (9CI) (CA INDEX NAME)



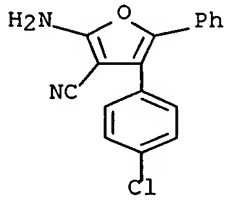
RN 14774-62-0 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-methoxyphenyl)-5-phenyl- (CA INDEX NAME)



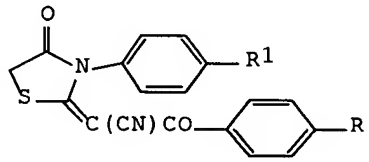
RN 94556-80-6 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4,5-bis(4-methoxyphenyl)- (CA INDEX NAME)



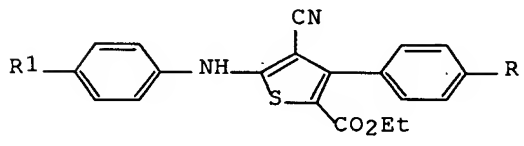
IT 14774-60-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by aromatization of aminodihydrofurandicarbonitrile)
RN 14774-60-8 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-chlorophenyl)-5-phenyl- (9CI) (CA INDEX NAME)



L13 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:71982 CAPLUS Full-text
DOCUMENT NUMBER: 90:71982
TITLE: Basic rearrangement of 2-methylidyne thiazolidin-4-one. Part 2. Reactivity and biological activity in the thiazole series
AUTHOR(S): Dehne, H.; Krey, P.
CORPORATE SOURCE: Sekt. Biol./Chem., Paedagog. Hochsch. "Liselotte Herrmann", Guestrow, Ger. Dem. Rep.
SOURCE: Pharmazie (1978), 33(10), 687-8
CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE: Journal
LANGUAGE: German
GI



I



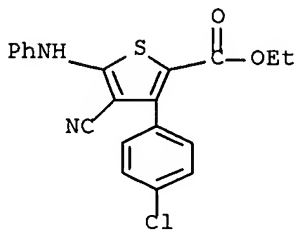
II

AB The thiazolidinones I (R = Cl; R1 = H, Cl, Me) reacted with NaOEt in EtOH to give ring opening, followed by cyclization to II.

IT 69148-49-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 69148-49-8 CAPLUS

CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(phenylamino)-, ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:74292 CAPLUS Full-text

DOCUMENT NUMBER: 88:74292

TITLE: Substituted 2-aminothiophenes

INVENTOR(S): Augustin, Manfred; Dehne, Heinz; Rudorf, Wolf Dieter; Krey, Peter

PATENT ASSIGNEE(S): Ger. Dem. Rep.

SOURCE: Ger. (East), 10 pp.
CODEN: GEXXA8

DOCUMENT TYPE: Patent

LANGUAGE: German

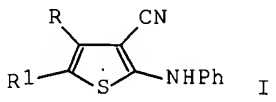
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 124302	A1	19770216	DD 1976-191493	19760226 <--

PRIORITY APPLN. INFO.: DD 1976-191493 A1 19760226

GI



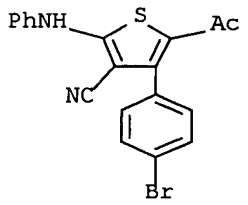
I

AB Approx. 20 title compds. I (R = Ph, 2-thienyl, 2-furyl, PhCH:CH, p-BrC6H4, p-ClC6H4, p-tolyl, p-anisyl; R1 = Ac, Bz, p-BrC6H4CO, p-MeC6H4CO, p-O2NC6H4CO, NO2) were prepared from RCOCH2CN, NaH, PhNCS, and R1CH2X (X = halide) or from RCO(NC)C:C(NHPh)SH, R1CH2X, and NaOEt. Thus, 0.05 mol BzCH2CN, 0.05 mol NaH, and 0.05 mol PhNCS in DMF were treated with 0.05 mol AcCH2Br to give 75% I (R = Ph, R1 = Ac). Also, 0.02 mol Bz(NC)C:C(NHPh)SH and 0.02 mol BzCH2Br gave 65% I (R = Ph, R1 = Bz).

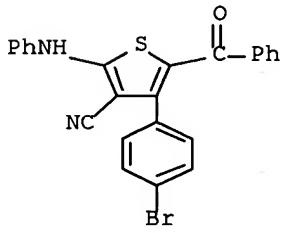
IT 65514-55-8P 65514-61-6P 65514-62-7P

65514-63-8P 65514-64-9P 65542-67-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

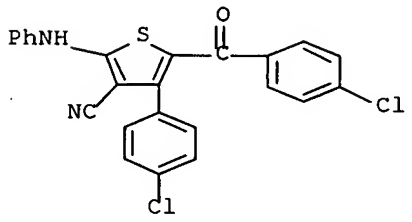
RN 65514-55-8 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-bromophenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



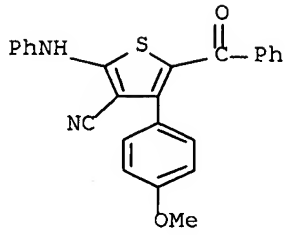
RN 65514-61-6 CAPLUS
CN 3-Thiophenecarbonitrile, 5-benzoyl-4-(4-bromophenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



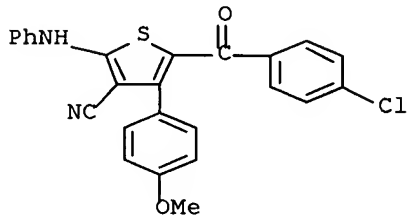
RN 65514-62-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(4-chlorobenzoyl)-4-(4-chlorophenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



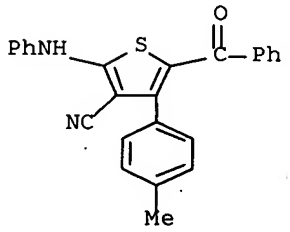
RN 65514-63-8 CAPLUS
CN 3-Thiophenecarbonitrile, 5-benzoyl-4-(4-methoxyphenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



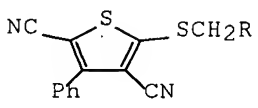
RN 65514-64-9 CAPLUS
CN 3-Thiophenecarbonitrile, 5-(4-chlorobenzoyl)-4-(4-methoxyphenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



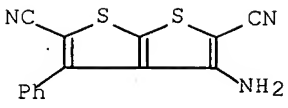
RN 65542-67-8 CAPLUS
CN 3-Thiophenecarbonitrile, 5-benzoyl-4-(4-methylphenyl)-2-(phenylamino)- (9CI) (CA INDEX NAME)



L13 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:422912 CAPLUS Full-text
DOCUMENT NUMBER: 87:22912
TITLE: Thiophenes through S-alkylation
AUTHOR(S): Augustin, M.; Rudorf, W. D.; Schmidt, U.
CORPORATE SOURCE: Sekt. Chem., Martin-Luether-Univ., Halle, Ger. Dem. Rep.
SOURCE: Tetrahedron (1976), 32(24), 3055-61
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: German
GI



I

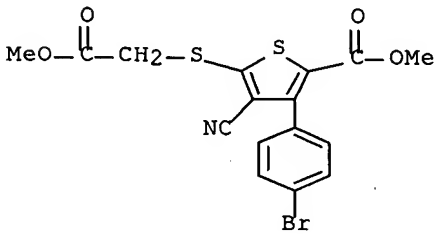


II

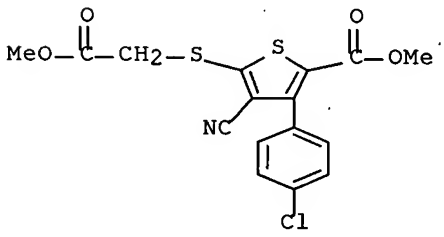
AB 3-(Methylthio)-3-(substituted methylthio)-2-aroylacrylonitriles, prepared from aroylacetonitriles by sequential treatment with CS2/NaH and MeI/active methylene compound, cyclized in the presence of base to give 2-methylthio-3-cyano-4-arylthiophenes. E.g., PhCOCH2CN with CS2/NaH and MeI/ClCH2CN gave 65.5% PhCOC(CN):C(SMe)SCH2CN which with NaOMe gave 45% I (R = H). 2-(Substituted methylthio) analogs of I, prepared similarly by omission of MeI, cyclized to thieno[2,3-b]thiophenes. E.g., I (R = CN) gave 20% II. 2-Anilinothiophenes were prepared similarly by using PhNCS in place of CS2.

IT 63243-92-5P 63243-93-6P 63243-94-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring closure of)

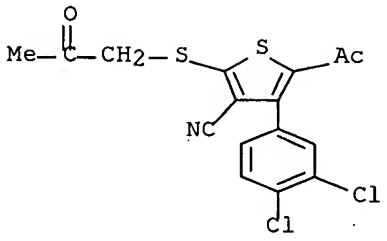
RN 63243-92-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-bromophenyl)-4-cyano-5-[(2-methoxy-2-oxoethyl)thio]-, methyl ester (9CI) (CA INDEX NAME)



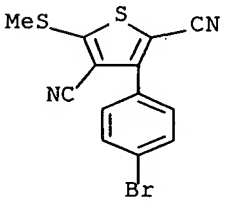
RN 63243-93-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-[(2-methoxy-2-oxoethyl)thio]-, methyl ester (9CI) (CA INDEX NAME)



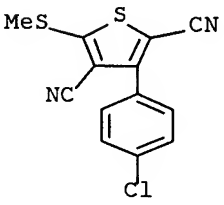
RN 63243-94-7 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(3,4-dichlorophenyl)-2-[(2-oxopropyl)thio]- (9CI) (CA INDEX NAME)



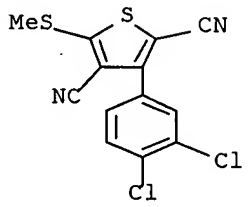
IT 63243-97-0P 63243-98-1P 63243-99-2P
63244-00-8P 63244-04-2P 63244-05-3P
63244-06-4P 63244-07-5P 63244-10-0P
63244-11-1P 63244-12-2P 63244-13-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 63243-97-0 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 3-(4-bromophenyl)-5-(methylthio)- (9CI) (CA INDEX NAME)



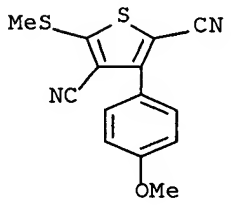
RN 63243-98-1 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 3-(4-chlorophenyl)-5-(methylthio)- (9CI) (CA INDEX NAME)



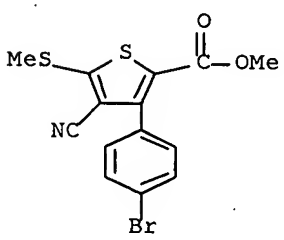
RN 63243-99-2 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 3-(3,4-dichlorophenyl)-5-(methylthio)- (9CI) (CA INDEX NAME)



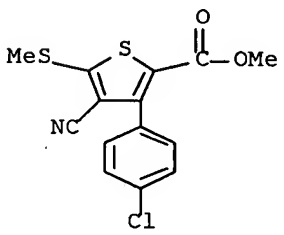
RN 63244-00-8 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 3-(4-methoxyphenyl)-5-(methylthio)- (9CI) (CA INDEX NAME)



RN 63244-04-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-bromophenyl)-4-cyano-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)

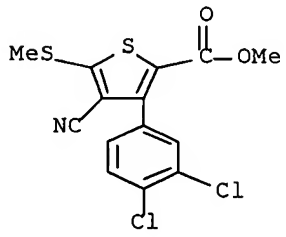


RN 63244-05-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(4-chlorophenyl)-4-cyano-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)

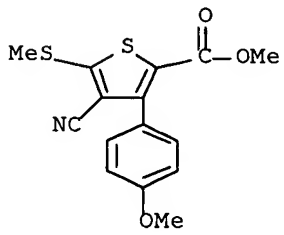


RN 63244-06-4 CAPLUS

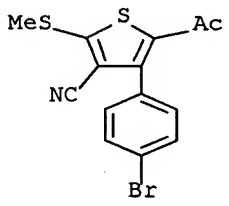
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(3,4-dichlorophenyl)-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



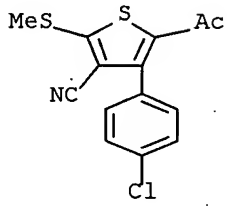
RN 63244-07-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-(4-methoxyphenyl)-5-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)



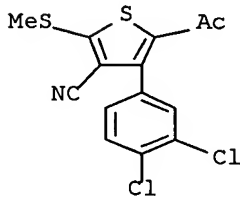
RN 63244-10-0 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-bromophenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)



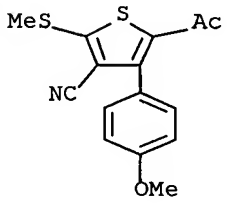
RN 63244-11-1 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-chlorophenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)



RN 63244-12-2 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(3,4-dichlorophenyl)-2-(methylthio)-
(9CI) (CA INDEX NAME)



RN 63244-13-3 CAPLUS
CN 3-Thiophenecarbonitrile, 5-acetyl-4-(4-methoxyphenyl)-2-(methylthio)-
(9CI) (CA INDEX NAME)

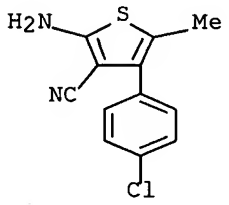


L13 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:449081 CAPLUS Full-text
DOCUMENT NUMBER: 79:49081
ORIGINAL REFERENCE NO.: 79:7889a,7892a
TITLE: 2,4-Diaminothieno[2,3-d]pyrimidines as antifolates and antimalarials. 3. Synthesis of 5,6-disubstituted derivatives and related tetracyclic analogs
AUTHOR(S): Rosowsky, A.; Chen, K. K. N.; Lin, M.
CORPORATE SOURCE: Child. Cancer Res. Found., Harvard Med. Sch., Boston, MA, USA
SOURCE: Journal of Medicinal Chemistry (1973), 16(3), 191-4
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Of a number of 5- and (or) 6-alkyl-, -aralkyl-, and -aryl-2,4-diaminothienopyrimidines synthesized, only 2,4-diamino-5-methyl-6-

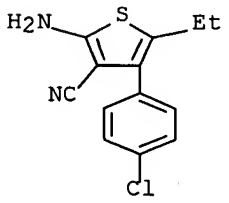
benzylthieno[2,3-d]pyrimidine (I) [18620-94-5] was active against Plasmodium berghei in mice (at 640 mg/kg s.c.). None of the compds. was active against P. gallinaceium in chicks. I and the 5-methyl-6-phenyl and 5-methyl-6-(3,4-dichlorophenyl) analogs showed antimetabolite activity against Streptococcus faecium (50% inhibition at 0.002 μg/ml). The 6-methyl-5-phenyl and 6-methyl-5-benzyl derivs. and 5,6-bridged compds. were less active or inactive in this assay. I was prepared by reaction of 1-phenyl-3-butanone [2550-26-7] with malononitrile [109-77-3] and powdered S to form 2-amino-5-benzyl-3-cyano-4-methylthiophene [41543-84-4], which was fused with chloroformamidine-HCl [29671-92-9] yield I.

IT 42160-32-7P 42160-33-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 42160-32-7 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-4-(4-chlorophenyl)-5-methyl- (9CI) (CA INDEX NAME)



RN 42160-33-8 CAPLUS
CN 3-Thiophenecarbonitrile, 2-amino-4-(4-chlorophenyl)-5-ethyl- (9CI) (CA INDEX NAME)



L13 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	1968:96786 CAPLUS Full-text
DOCUMENT NUMBER:	68:96786
ORIGINAL REFERENCE NO.:	68:18711a,18714a
TITLE:	Reaction of metallic compounds containing a labile hydrogen atom with α-halo ketones. IV. Properties of 2-amino-3-cyanofurans
AUTHOR(S):	Sharanin, Yu. A.; Karavan, V. S.; Temnikova, T. I.
CORPORATE SOURCE:	Leningr. Gos. Univ., Leningrad, USSR
SOURCE:	Zhurnal Organicheskoi Khimii (1967), 3(11), 1987-96 CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE:	Journal
LANGUAGE:	Russian
OTHER SOURCE(S):	CASREACT 68:96786

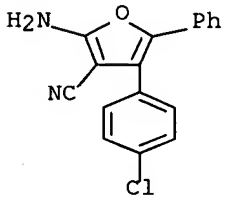
GI For diagram(s), see printed CA Issue.

AB To a mixture of 1.4 g. CH2(CN)2 and EtONa (obtained from 0.46 g. Na and 25 ml. EtOH) 0.02 mole PhCOCH(R)C6H4Cl-p (I, R = Cl) was added with stirring at 10-15°. The mixture was stirred for 30 min. at room temperature to give 78.3% 2-amino-3-cyano-4-(p-chlorophenyl)-5-phenylfuran (II) m. 217-18°. Condensation of CH2(CN)2 with I (R = OH) also gave II. The reaction is not general; for instance 4-(dialkylamino)benzoins do not give disubstituted-2-amino-3-cyanofurans (III), and reaction of PhCOCPh2Br with NaCH(CN)2 gave only PhCOCHPh2. Reactions of III are described. Condensation of III with maleic anhydride gave the following IV (R, R1, % yield, m.p. given): Me, H, 78, 252-3°; H, Me, 78, 199°; H, MeO, 79, 208-9°; EtO, H, 82, 151-2°; H, H, 76, 163-5° Condensation of III with BzH or its analogs gave the following V (R, R1, R2, % yield, m.p. given): H, CO2Et, H, 59, 146°; H, Ac, H, 65, 140°; H, H, Cl, 96, 177.5°; Me, Ph, H, 82, 189-90°; H, MeC6H4, H, 90, 186-7°; Cl, Ph, H, 89, 188°; H, ClC6H4, H, 92, 182-3°; Br, Ph, H, 81, 181-2°; MeO, Ph, H, 64, 175-6°; H, MeOC6H4, H, 71, 170-1°; Ph, Ph, H, 78, 204-6°; H, Ph, H, 96, 202-3°; H, Ph, NO2, 82, 213-14°; H, Ph, Cl, 88, 176-7°; H, Ph, Br, 94, 170-1°; H, Ph, m-Cl, 81, 144-5°; H, Ph, o-Cl, 94, 209-10°; H, Ph, NMe2, 91, 183-4°. A hot solution of 0.005 mole III in 30 ml. alc. was added to a boiling solution of 1.52 g. 1,2-naphthoquinone-4-sulfonic acid in 30 ml. 20% EtOH containing 0.2 g. NaOH. The mixture on cooling deposited VI [R, R1, % yield, m.p., and λmaximum in mμ (log ε) given]: Ph, H, 77, >300°, 254(4.36), 288(4.23); Ph, Ph, 62, 284-7°, 255(4.45), 299(4.20); MeC6H4, Ph, 71, >300°, 256(4.30), 306(4.11); ClC6H4, Ph, 84, >300°, 255(4.23), 304(4.01); α-furyl, α-furyl, 59, >300°, 373(3.85). III (R = R1 = α-furyl), m. 184-5° (MeCN), was prepared by condensation of CH2(CN)2 with furoin. Condensation of III with HCONH2 by heating for 1 hr. gave the following 5-R,6-R1-substituted-4- aminofuro[2,3-d]pyrimidines (R, R1, % yield, and m.p. given): Ph, H, 90, 296-8°; Ph, CO2Et, 45, 188-9°; ClC6H4, Ph, 88, 258-9°; α-furyl, α-furyl, 49, 196-7°. Refluxing a mixture of 3 g. III, 10 ml. CS2, and 10 ml. pyridine for 50 hrs. gave the following 5-R,6-R1-1-H,3-H-furo[2,3-d]pyrimidine-2,4-dithiones (R, R1, and % yield given): Ph, H, 18; Ph, Ph, 21; MeC6H4, Ph, 24; MeOC6H4, Ph, 19; PhC6H4, Ph, 26. Refluxing for 1 hr. a solution of 0.01 mole III in 50 ml. alc. containing 10 ml. concentrated HCl gave 4-R,3-R1-substituted-3-cyano-4- hydroxycrotonolactones (R, R1, % yield, and m.p. given): Ph, H, 36, 149-50°; MeC6H4, Ph, 52, 184-6°; ClC6H4, Ph, 48, 155-6°; Ph, MeOC6H4, 42, 172-3°; Ph, Ph, 40, 141-2°.

IT 14774-60-8P 18031-71-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

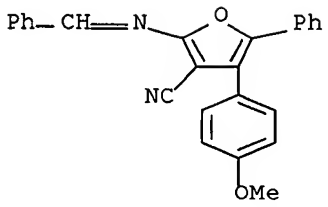
RN 14774-60-8 CAPLUS

CN 3-Furancarbonitrile, 2-amino-4-(4-chlorophenyl)-5-phenyl- (9CI) (CA INDEX NAME)

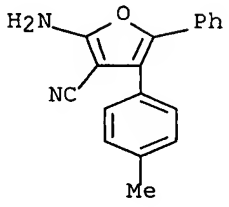


RN 18031-71-5 CAPLUS

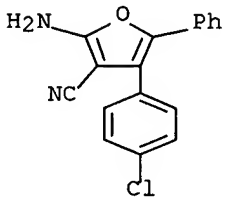
CN 3-Furonitrile, 2-(benzylideneamino)-4-(methoxyphenyl)-5-phenyl- (8CI) (CA INDEX NAME)



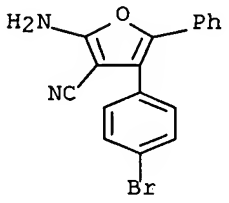
L13 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1967:443778 CAPLUS Full-text
DOCUMENT NUMBER: 67:43778
ORIGINAL REFERENCE NO.: 67:8231a,8234a
TITLE: Reaction of metal derivatives of compounds containing a labile hydrogen atom with α-halo ketones. II. Conversion of substituted α-halodeoxybenzoins to 2-amino-3-cyano-4,5-diarylfurans
AUTHOR(S): Temnikova, T. I.; Sharanin, Yu. A.; Karavan, V. S.
CORPORATE SOURCE: Leningr. Gos. Univ., Leningrad, USSR
SOURCE: Zhurnal Organicheskoi Khimii (1967), 3(4), 681-4
CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 67:43778
GI For diagram(s), see printed CA Issue.
AB cf. CA 66: 75474d. The title compds. of formula I were synthesized by either Gewald's method (CA 58: 496h) by treating H2C(CN)2with benzoins PhCOCHXC6H4Z-p (II) or PhCHYCOC6H4Z-p (III) (X = Y = OH, Z = H, Me, OMe, Ph, Cl, or Br), and by a known method (CA 66: 75474d) by treating α-halo ketones II or III (X = Cl, Y = Br, Z = H, Me OMe, Ph, Cl, or Br) with NaCH(CN)2. Exptl. details are not given, both methods gave identical products; the following I are listed: [R, R', (%) yields of I prepared from α-chloro ketones, α-bromo ketones, and benzoins, and m.p. given] Ph, Ph, 57.7, 50.0, 73.6, 207-8°; MeC6H4, Ph, -, 80.3, 78.0, 196-7°; Ph, MeC6H4, 83.0, -, 80.4, 191-2°; MeOC6H4, Ph, -, 60.4, 77.5, 182-3°; EtOC6H4, Ph, -, 72.4, -, 175°; PhC6H4, Ph, -, 77.4, 77.0, 208-10°; Ph, PhC6H4, 79.5, -, 84.0, 203-4°; Ph, ClC6H4, -, -, 80.0, 221-3°; Ph, BrC6H4, -, -, 63.4, 215-17°; Ph, MeOC6H4, 62.0, -, 71.5, 176-7°. Heating of I with HCHO gave the following IV: (R, R', % yield, and m.p. given) Ph, Ph, 70, 266-7°; MeC6H4, Ph, 55, 248-9°; Ph, MeC6H4, 53, 245-6°; MeOC6H4, Ph, 46, 236-7°; Ph, MeOC6H4, 42, 233-4°; EtOC6H4, Ph, 60, 232-3°; PhC6H4, Ph, 61, 250-1°; Ph, PhC6H4, 67, 245-6°; Ph, ClC6H4, 65, 274-5°; Ph, BrC6H4, 68, 294-5°.
IT 14774-55-1P 14774-60-8P 14774-61-9P
14774-62-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 14774-55-1 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-methylphenyl)-5-phenyl- (9CI) (CA INDEX NAME)



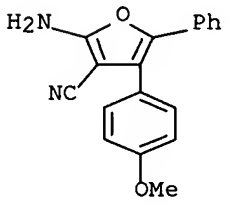
RN 14774-60-8 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-chlorophenyl)-5-phenyl- (9CI) (CA INDEX NAME)



RN 14774-61-9 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-bromophenyl)-5-phenyl- (9CI) (CA INDEX NAME)



RN 14774-62-0 CAPLUS
CN 3-Furancarbonitrile, 2-amino-4-(4-methoxyphenyl)-5-phenyl- (CA INDEX NAME)



8 LL12
L14 8 LL12 NOT L13

=> d 1-8 ibib abs hitstr

L14 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:665112 CAPLUS Full-text
DOCUMENT NUMBER: 145:121353
TITLE: Endocytosis of the glucose transporter GLUT8 is mediated by interaction of a dileucine motif with the β2-adaptin subunit of the AP-2 adaptor complex
AUTHOR(S): Schmidt, Ulrike; Briese, Sophie; Leicht, Katja; Schuermann, Annette; Joost, Hans-Georg; Al-Hasani, Hadi
CORPORATE SOURCE: German Institute of Human Nutrition, Potsdam, Nuthetal, 14558, Germany
SOURCE: Journal of Cell Science (2006), 119(11), 2321-2331
CODEN: JNCSAI; ISSN: 0021-9533
PUBLISHER: Company of Biologists Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The glucose transporter GLUT8 cycles between intracellular vesicles and the plasma membrane. Like the insulin-responsive glucose transporter GLUT4, GLUT8 is primarily located in intracellular compartments under basal conditions. Whereas translocation of GLUT4 to the plasma membrane is stimulated by insulin, the distribution of GLUT8 is not affected by insulin treatment in adipose cells. However, blocking endocytosis by co-expression of a dominant-neg. dynamin GTPase (K44A) or mutation of the N-terminal dileucine (LL12/13) motif in GLUT8 leads to accumulation of the glucose transporter at the cell surface in a variety of different cell types. Yeast 2-hybrid analyses and GST pulldown assays reveal that the LL signal constitutes a binding site for the β2-adaptin subunit of the heterotetrameric AP-2 adaptor complex, implicating this motif in targeting of GLUT8 to clathrin-coated vesicles. Moreover, yeast 2-hybrid assays provide evidence that the binding site for the LL motif maps to the appendage domain of β2-adaptin. To analyze the biol. significance of the LL/β2 interaction, we utilized RNA interference to specifically knockdown AP-2. These results show that RNAi-mediated targeting of the μ2 subunit leads to cellular depletion of AP-2, but not AP-1 adaptor complexes in HeLa cells. As a consequence, GLUT8 accumulates at the plasma membrane at comparable levels to those observed in K44A-transfected cells. Conversely, the intracellular localization of mutant GLUT8-LL/AA is restored by replacing the LL motif in GLUT8 with the transferrin receptor-derived μ2-adaptin binding motif YTRF, indicating that for endocytosis both AP-2 binding motifs can substitute for each other. Thus, these data demonstrate that recruitment of GLUT8 to the endocytic machinery occurs via direct interaction of the dileucine motif with β2-adaptin, and that endocytosis might be the main site at which GLUT8 is likely to be regulated.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:390683 CAPLUS Full-text
DOCUMENT NUMBER: 138:130168
TITLE: Novel mixed-ligand derivatives of cobalt(II) salts with 1,3-diones and sulphur donor ligands
AUTHOR(S): Tripathy, S. L.; Mahapatra, S. C.
CORPORATE SOURCE: P. G. Department of Chemistry, D. D. College, Keonjhar, 758 001, India
SOURCE: Journal of Teaching and Research in Chemistry (2001),

8(2), 25-28
CODEN: JTRCEN; ISSN: 0971-6408
PUBLISHER: International Society of Teachers and Researchers in Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:130168
AB Reactions of CoX2 (X = Cl, Br, NO3, ClO4) with relevant 1,3-dione and thiourea or substituted thiourea in EtOH medium gave penta- and hexa-coordinated mixed ligand complexes [CoXLL12], [Co(NO3)LL12] and [CoLL12(H2O)2]ClO4 (X = Cl or Br; LH = acetylacetone or benzoylacetone and L1 = thiourea or N,N'-diphenylthiourea). The compds. were isolated, characterized and possible stereochem. deduced from anal., spectral (IR and electronic), conductivity and magnetic susceptibility data.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:570058 CAPLUS Full-text
DOCUMENT NUMBER: 135:156141
TITLE: Microstructure of rapidly solidified Al-Cr-Zr-Ti alloy
AUTHOR(S): Su, Yong; Chen, Yiqing; Ding, Houfu; Huang, Xingmin
CORPORATE SOURCE: School of Material Science and Technology, Hefei University of Technology, Hefei, 230009, Peop. Rep. China
SOURCE: Xiyou Jinshu (2001), 25(3), 166-169
CODEN: XIJID9; ISSN: 0258-7076
PUBLISHER: Xiyou Jinshu Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The as-spun and as-annealed microstructures of rapidly solidified Al-4Cr-4Zr-2Ti(at%) alloy were studied by TEM and energy dispersive spectrum anal. (EDS). The microstructure of the as-spun alloy was in the totally solid-solution state. The results showed that annealing at 350° for 4 h resulted in formation of continuous grain boundary ppts. (GBPs), annealing at 450° x 4 h resulted in the intergranular precipitation of needle Al13(Cr,Ti)2 phase and the GBPs of globular Ll2-Al3 (Zr, Ti) phase, and after annealing at 550° x 4 h metastable phase Ll12-Al3(Zr, Ti) transformed to stable phase DO23-Al3 (Zr, Ti).

L14 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:56364 CAPLUS Full-text
DOCUMENT NUMBER: 126:100866
TITLE: Association of herpes simplex virus regulatory protein ICP22 with transcriptional complexes containing EAP, ICP4, RNA polymerase II, and viral DNA requires posttranslational modification by the UL13 protein kinase
AUTHOR(S): Leopardi, Rosario; Ward, Patricia L.; Ogle, William O.; Roizman, Bernard
CORPORATE SOURCE: Marjoire B. Kovler Viral Oncology Laboratories, University of Chicago, Chicago, IL, 60637, USA
SOURCE: Journal of Virology (1997), 71(2), 1133-1139
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The expression of herpes simplex virus 1 γ (late) genes requires functional α proteins (γ2 genes). We report that late in infection after the onset of

viral DNA synthesis, cell nuclei exhibit defined structures which contain two viral regulatory proteins (infected cell proteins 4 and 22) required for γ gene expression, RNA polymerase II, a host nucleolar protein (EAP or L22) known to be associated with ribosomes and to bind small RNas, including the Epstein-Barr virus small nuclear RNAs, and newly synthesized progeny DNA. The formation of these complexes required the onset of viral DNA synthesis. The association of infected cell protein 22, a highly posttranslationally processed protein, with these structures did not occur in cells infected with a viral mutant deleted in the genes UL13 and US3, each of which specifies a protein kinase known to phosphorylate the protein.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:323030 CAPLUS Full-text
DOCUMENT NUMBER: 122:150101
TITLE: Synthesis and characterization of some peroxo complexes of molybdenum(VI) and dioxouranium(VI)
AUTHOR(S): Islam, M. Saidul; Islam, M. Nazrul; Uddin, M. Masir
CORPORATE SOURCE: Department Chemistry, Rajshahi University, Rajshahi, 6205, Bangladesh
SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Bio-inorganic, Physical, Theoretical & Analytical Chemistry (1994), 33A(11), 1028-30
CODEN: ICACEC; ISSN: 0376-4710
PUBLISHER: Publications & Information Directorate, CSIR
DOCUMENT TYPE: Journal
LANGUAGE: English
AB [MO(O2)LL12] (M = Mo, U; LH2 = diphenic acid; L1 = pyridine, quinoline, isoquinoline, 2-picoline, 4-picoline) were prepared and characterized by elemental anal., IR, and molar conductance studies. The complexes are inert towards oxidation of allyl alc., but oxidize triphenylphosphine and triphenylarsine to their oxides.

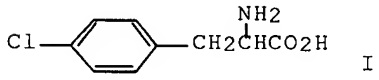
L14 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:196851 CAPLUS Full-text
DOCUMENT NUMBER: 102:196851
TITLE: Studies on copper(II) mixed β-diketonates and their adducts with nitrogen bases
AUTHOR(S): Mishra, R. C.; Mishra, P. K.; Mohapatra, B. K.; Panda, D.
CORPORATE SOURCE: Dep. Chem., B. J. B. Coll., Bhubaneswar, 751 014, India
SOURCE: Journal of the Indian Chemical Society (1984), 61(9), 802-4
CODEN: JICSAH; ISSN: 0019-4522
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cu(acac)2 (Hacac = acetylacetone) reacted with CuL2 (HL = dipivaloylmethane, thenoyltrifluoroacetone, trifluoroacetylacetone, hexafluoroacetylacetone, pivaloyltrifluoroacetone) in C6H6 to give Cu(acac)L, which in turn reacted with quinoline (L1) to give Cu(acac)LL1 or Cu(acac)LL12 (HL = hexafluoroacetylacetone). The complexes were characterized by elemental anal., molar conductivity, magnetic moment, and spectral (IR, electronic) methods.

L14 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:58963 CAPLUS Full-text

DOCUMENT NUMBER: 92:58963
TITLE: Preparation of cationic complexes [Rh(diolefin)L2]ClO4 and their carbonylation reactions
AUTHOR(S): Uson, R.; Oro, L. A.; Valderrama, M.; Claver, C.
CORPORATE SOURCE: Dep. Inorg. Chem., Univ. Zaragoza, Zaragoza, Spain
SOURCE: Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (1979), 9(6), 577-84
CODEN: SRIMCN; ISSN: 0094-5714
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The 1:1 addition of Ph3As or Ph3Sb to [RhL2]ClO4 (L = tetrafluorobenzobarrelene, 2,5-norbornadiene, 1,5-cyclooctadiene gave [Rh LL12]ClO4 (L1 = Ph3As, Ph3Sb), carbonylation of which gave pentacoordinated [RhL(AsPh3)CO]ClO4 or tetracoordinated [Rh(CO)2(SbPh3)2]ClO4 complexes.

L14 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:469261 CAPLUS Full-text
DOCUMENT NUMBER: 91:69261
TITLE: Effects of p-chlorophenylalanine and 5,6-dihydroxytryptamine on the free-running rhythms of locomotor activity and plasma corticosterone in the rat exposed to continuous light
AUTHOR(S): Honma, Kenichi; Watanabe, Kenji; Hiroshige, Tsutomu
CORPORATE SOURCE: Sch. Med., Hokkaido Univ., Sapporo, 060, Japan
SOURCE: Brain Research (1979), 169(3), 531-44
CODEN: BRREAP; ISSN: 0006-8993
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB p-Chlorophenylalanine (I) [1991-78-2] and 5,6-dihydroxytryptamine (5,6-DHT) [5090-36-8], depletors of brain serotonin [50-67-9], were administered to the rat and circadian rhythms of locomotor activity and plasma corticosterone [50-22-6] were determined simultaneously in individual rats in light-dark cycles (LD) and in 200 lx continuous light (LL). In I-treated rats which had 70% depletion of brain serotonin, circadian rhythms of locomotor activity in LL, and of plasma corticosterone and ACTH in LD, disappeared for several days after the drug injection. Circadian rhythms of locomotor activity reappeared after the LL7 day and free-ran with a phase shift. Free-running periods of these rats did not differ significantly from that of control rats. However, the acrophase of the I-treated group on the LL11 day was 5 h advanced as compared with that of controls. Circadian rhythm of plasma corticosterone in the I-treated rats was detected on the LL12 day, but their peak times were distributed around 24:00 h instead of 08:00 h observed in control rats. The 5,6-DHT-treated rats which had only 40% depletion of brain serotonin exhibited normal free-running rhythms in both locomotor activity and plasma corticosterone in LL and no difference in the acrophases of these functions on the LL12 day as compared with controls. Apparently, I affects the circadian clock (or clocks) itself by blocking the clock to free-run or at least effectively shortening the free-running periods of locomotor activity and plasma corticosterone in the rat.

STN INTERNATIONAL LOGOFF AT 15:28:29 ON 14 NOV 2007